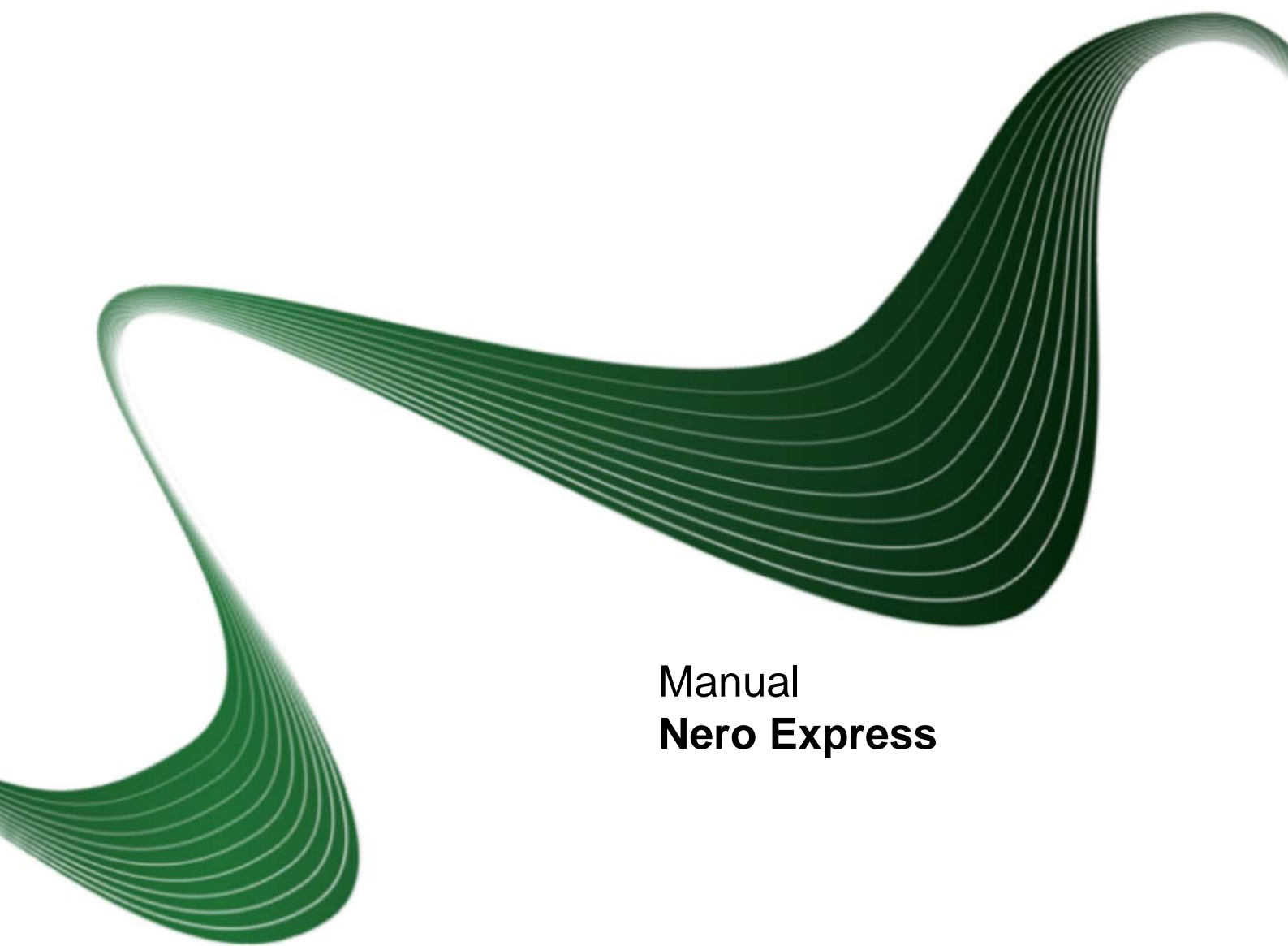


nero

BackItUp & Burn



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:

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

1.2 About Nero Express

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.

1.3 Working With Nero Express

Basically, the user interface of Nero Express consists of the selection of a compilation method in the start screen. 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. For each screen, the manual contains a chapter in which all areas are described in detail.

Burning a Compilation


Burning marks the end. To do this, 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.


2 Starting The Program

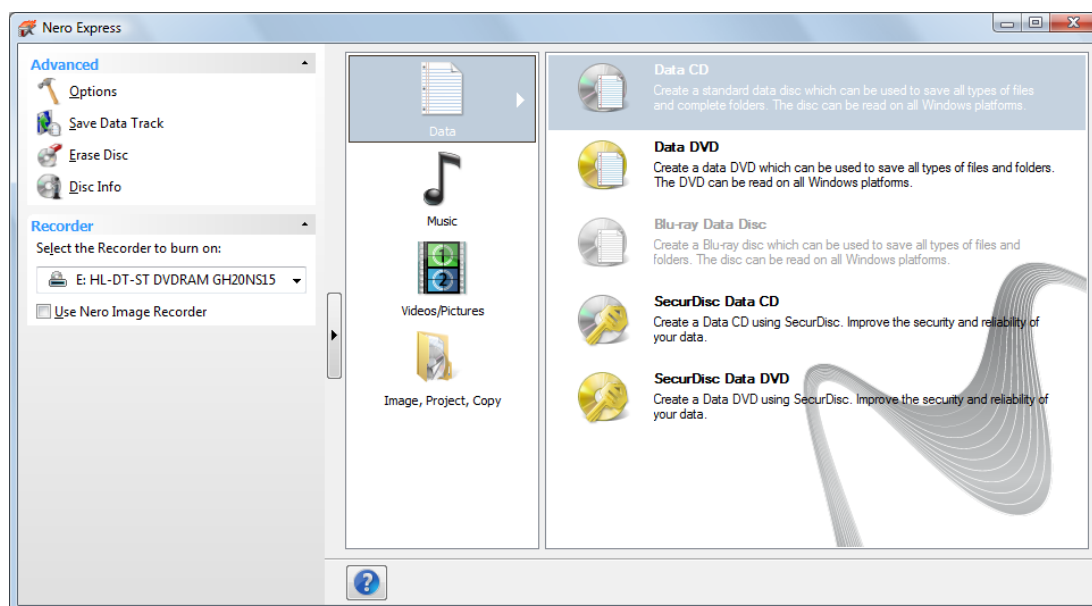
To start Nero Express, proceed as follows:

1. Click the **Nero BackItUp** icon.
➔ The Nero BackItUp window is opened.
2. Click the  button.
3. The Nero Express window is opened.
➔ You have started Nero Express.

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.

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




The following compilation methods are available:

Data	Allows you to compile and burn all types of files and folders.
Music	Creates a standard Audio CD that will play on all CD players.
Videos/Pictures	Creates a Video-DVD from video files.
Image, Project, Copy	Allows you to copy a source disc and to load an image file or a saved project.



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





3.1 Extended Area (Start Screen)

You can access the additional options and features in the extended area of the start screen by clicking 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:

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 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 re-writable CD/DVD.
Disc Info	Opens the Disc Info window to display information about the inserted CD/DVD. The total capacity and available capacity are displayed, in addition to the tracks and sessions.
Recorder	Defines the recorder that you want to use for burning and/or the Nero Image Recorder.

See also:

-  [Configuration Options→ 38](#)
-  [Saving Data Track→ 36](#)
-  [Erase Rewritable Disc Window→ 34](#)
-  [Choice of Burner→ 25](#)

4 Compilation Screen

You can access the Nero Express compilation screens by selecting the compilation method 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.

The following setting options are available in the compilation screen:

Button Add	Opens the Add files and folders window.
Button Remove	Removes the selected file.
Button Play	Plays the selected file.
Button Properties	Opens the Audio Track Properties window. 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. Available for Audio CDs only.

5 Compiling Data CDs/DVDs

With Nero Express you can compile and burn all types of files and folders. If a DVD recorder is installed on your computer, you can burn both data CDs, and data DVDs. If you have a CD recorder, you can only burn data CDs and the option for burning a DVD is already grayed out in the start screen. The procedure for both compilation methods is identical.



Blu-ray recorder

If a Blu-ray recorder is installed on your computer, you can select it to display the relevant entry in order to burn a Blu-ray disc. The procedures for both compiling and burning a Blu-ray data disc are the same as the compilation method for a data CD/DVD.



SecurDisc recorder

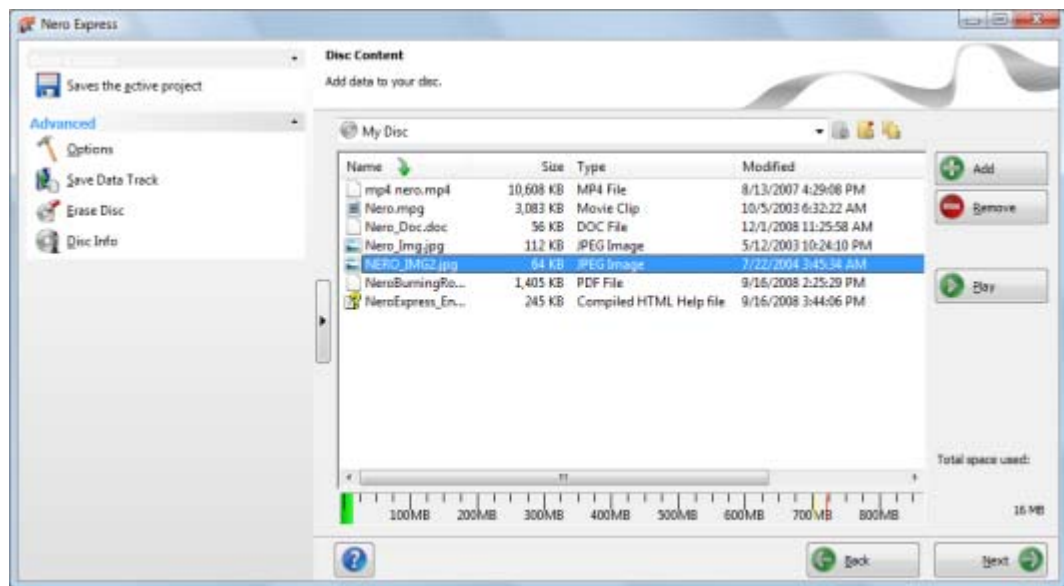
If a SecurDisc recorder is installed on your computer, you can select it to display the relevant entry in order to burn a SecurDisc CD or DVD. The procedures for both adding data and burning a SecurDisc data CD/DVD are the same as the compilation method for a standard data CD/DVD.



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

To create a data CD/DVD, proceed as follows:

1. Click the **Data** menu icon in the Nero Express start screen.
 - The **Data CD** and **Data DVD** options are displayed.
2. Click the option you want.
 - The **Disc Content** compilation screen for data CDs/DVDs 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 CD/DVD and can now burn this compilation.

See also:

[Burn Compilation](#) → 25

5.1 Enabling SecurDisc Settings

SecurDisc is a hardware and software technology with which you can create discs with special protection properties, such as data integrity, reconstructability, encryption and duplication protection. Such discs can be created with SecurDisc supported drives and Nero Express and read from any drive with InCD or InCD Reader.

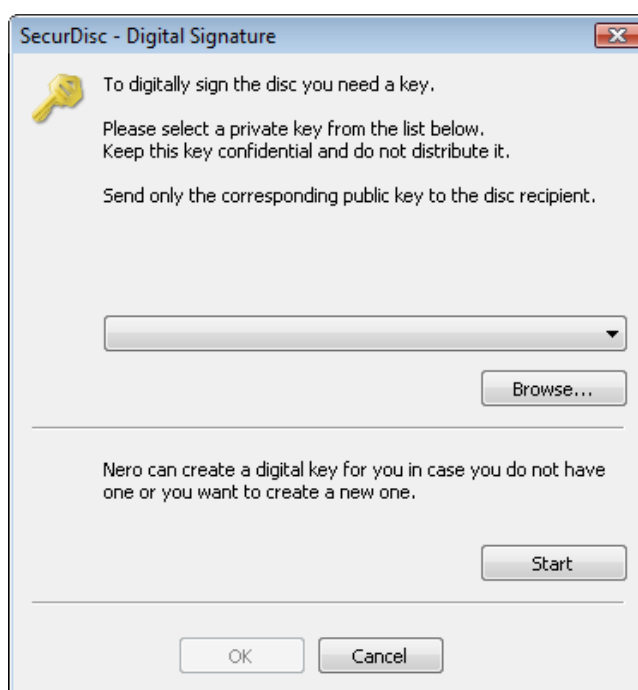


The **Copy protection** feature is only available for SecurDisc Data DVD.

To be able to view copy-protected files, you will need a special application called SecurDisc Viewer, which can be downloaded free of charge at www.securdisc.net.



To protect the data on your SecurDisc CD/DVD from unauthorized access with a password, to protect PDF files with duplication protection, to remove duplication protection by entering a password, to sign the disc with a digital signature, or to limit the data redundancy, proceed as follows:

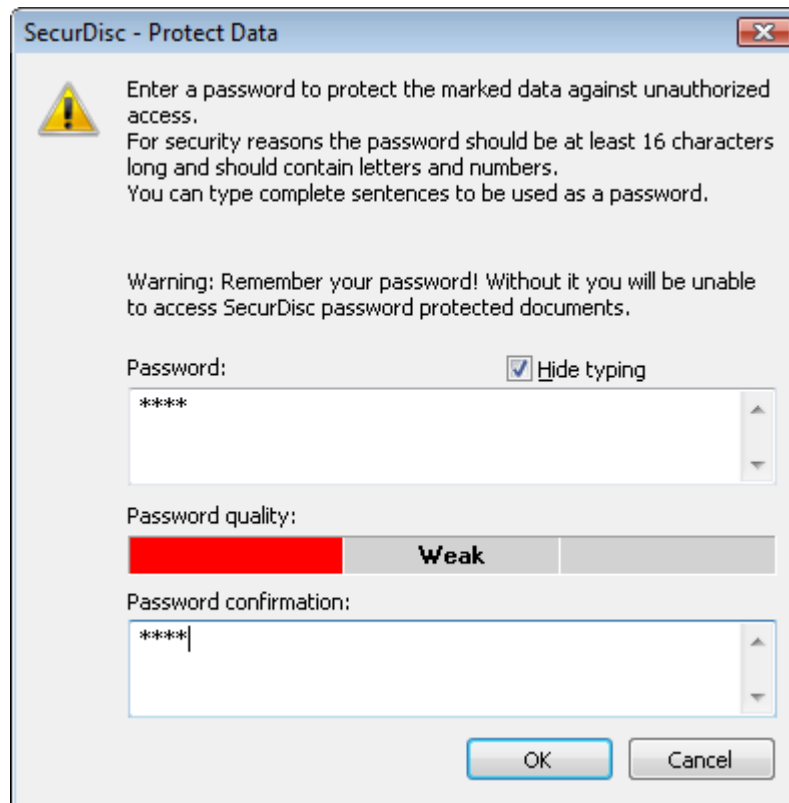
1. Select the **Password protection** check box in the extended area of the compilation screen.
→ A lock symbol shows that all data is protected.
2. To disable or selectively enable the protection feature for individual files:
 1. Highlight the required file to display the **Unprotect/Protect** button.
 2. Click the **Unprotect/Protect** button to enable or disable protection.
→ The protection feature is enabled or disabled for the selected file.
3. Select the **Digital signature** check box in the extended area of the compilation screen.
→ The **SecurDisc – Digital Signature** window is opened.



SecurDisc - Digital Signature window

4. If you have already created a digital key:
 1. Click the **Browse** button.
→ The **SecurDisc – Select Private Keys** window is opened.

2. Select the key and click the **OK** button.
 5. To create a digital key:
 1. Click the **Start** button.
 - The **SecurDisc – Create Digital Key** window is opened.
 2. Read the instructions and click the **Next** button.
 - The **SecurDisc Key Creation Process** window is opened.
 3. 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.
 4. Click the **Next** button.
 - The **SecurDisc – Key Creation Completed** window is opened.
 5. Enter a file name for the key you have created and click the **Finish** button.
 - The **SecurDisc – Digital Signature** window is opened and the selected key is displayed in the drop-down menu.
 6. Click the **OK** button.
 - The corresponding window will open to inform you that the disc is being digitally signed with the selected key.
-  You can pass on the relevant public key to recipients to enable them to verify the signature.
7. Click the **OK** button.
 8. Select the **Copy protection** check box in the extended area of the compilation screen.
 - All PDF files are copy-protected. The check box **Use password to disable copy protection** is displayed.
 9. To permit duplication of the copy-protected data after entering a password:
 1. Enable the **Use password to disable copy protection** check box.
 - The **SecurDisc – Allow Duplication by Password** window is opened.
 2. Enter the desired password in the **Password** input area and then click the **OK** button.
 10. To enhance the burning speed by limiting the data redundancy or to configure the data redundancy:
 1. Select the **Intended Data Reliability** check box.
 - 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.
11. Click the **Next** button.
 - The **SecurDisc – Protect Data** window is opened.



SecurDisc – Protect Data window

12. 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 enabled SecurDisc settings according to your requirements and can now burn the CD/DVD.

6 Compiling Audio CDs

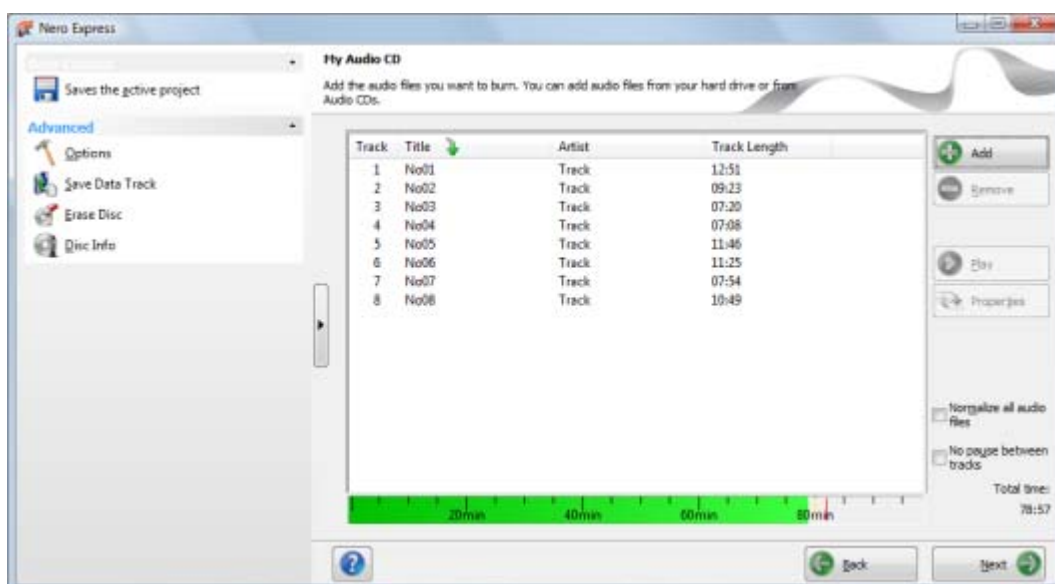
With Nero Express you can create an Audio CD that contains music files. It can be played using all standard CD players. To compile an Audio CD, source files with different audio formats (e.g. MP3) are automatically converted into Audio CD format before being burned.



Please note that some CD players cannot play CD-RWs. Use CD-R discs to burn Audio CDs.

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 **Audio CD**.
→ 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 opens.
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. Enable the **Normalize all audio files** and **No pause between tracks** check boxes as required.
9. Click the **Next** button.
 - ➔ You have successfully compiled an Audio CD and can now burn this compilation.

See also:

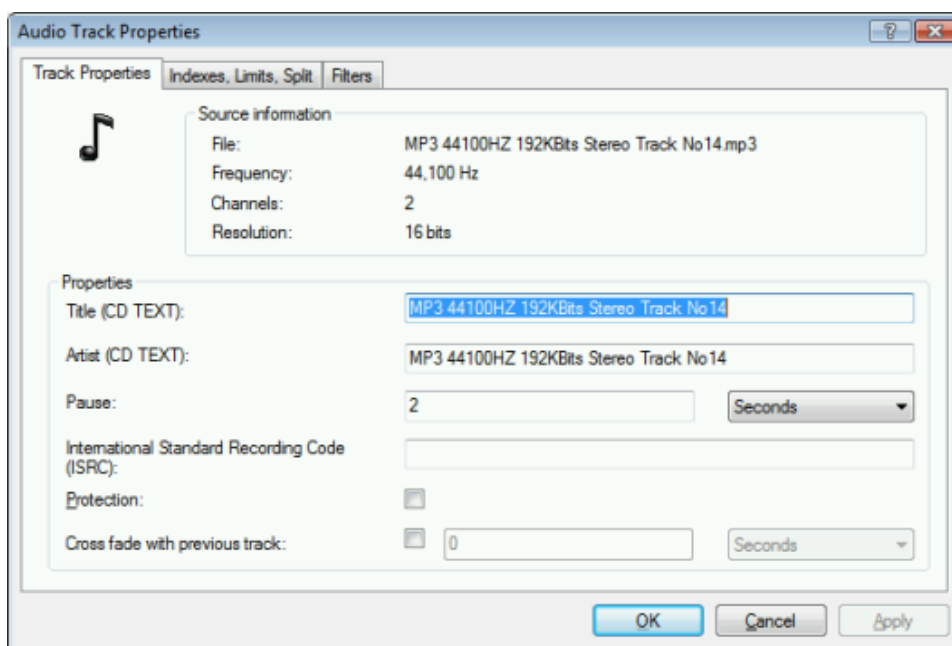
 [Burn Compilation](#) → 25

6.1 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 Track Properties Tab

On the **Track Properties** tab you will find basic information on the selected file in the **Source information** area.



Track Properties Tab

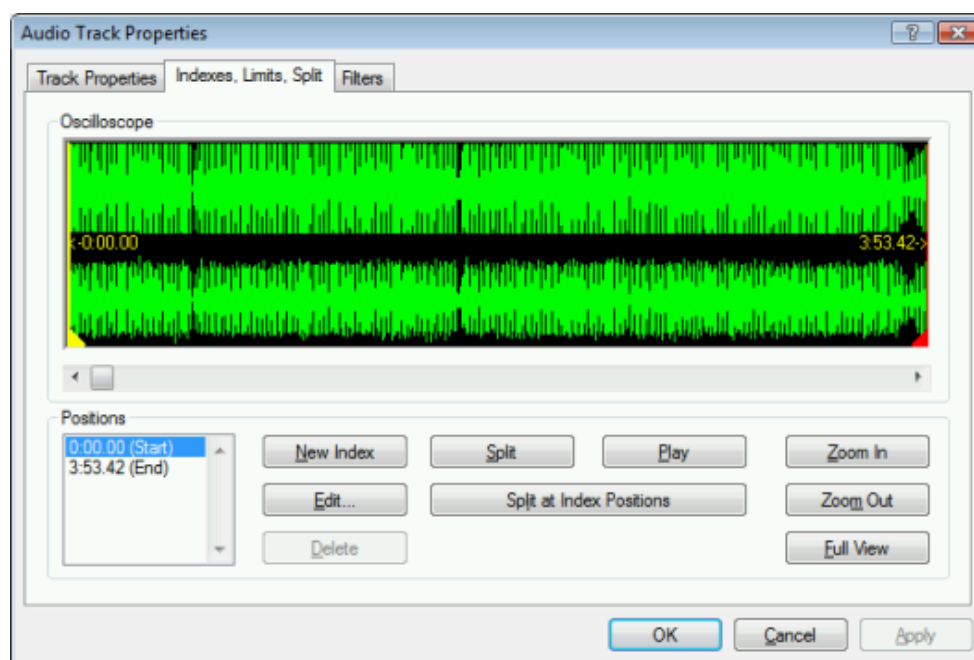
The following input areas are available in the **Properties** area:

Input field Title (CD TEXT)	Defines a title which is saved as CD text. CD players that support CD Text show the title name entered here.
---------------------------------------	---

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.
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 Copy protection	Enables copy protection.
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.

6.1.2 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

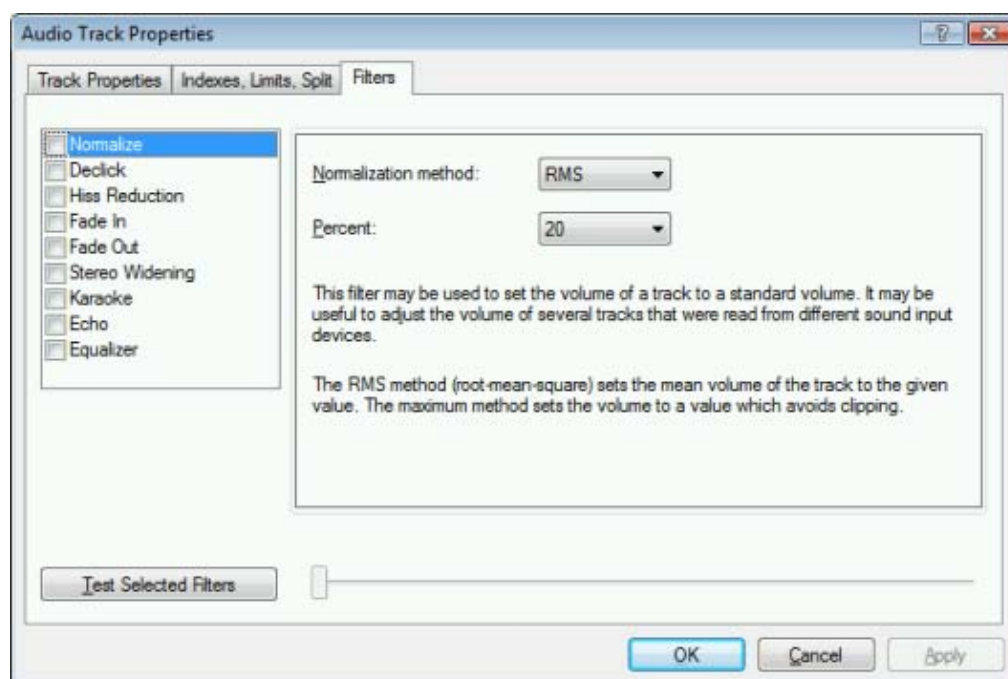
Audio files are displayed graphically in the **Oscilloscope** area.

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 Edit	Opens the Set Track End dialog box. 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 Play	Plays the audio file from the marked position. During playback, the Stop playing button is displayed.
Button Stop playing	Stops playback of the audio file. 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.

6.1.3 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 are not actually changed until they are written.



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.

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 playback, the configuration options for the filters can be changed, allowing the effect to be controlled.

7 Compiling DVD-Videos

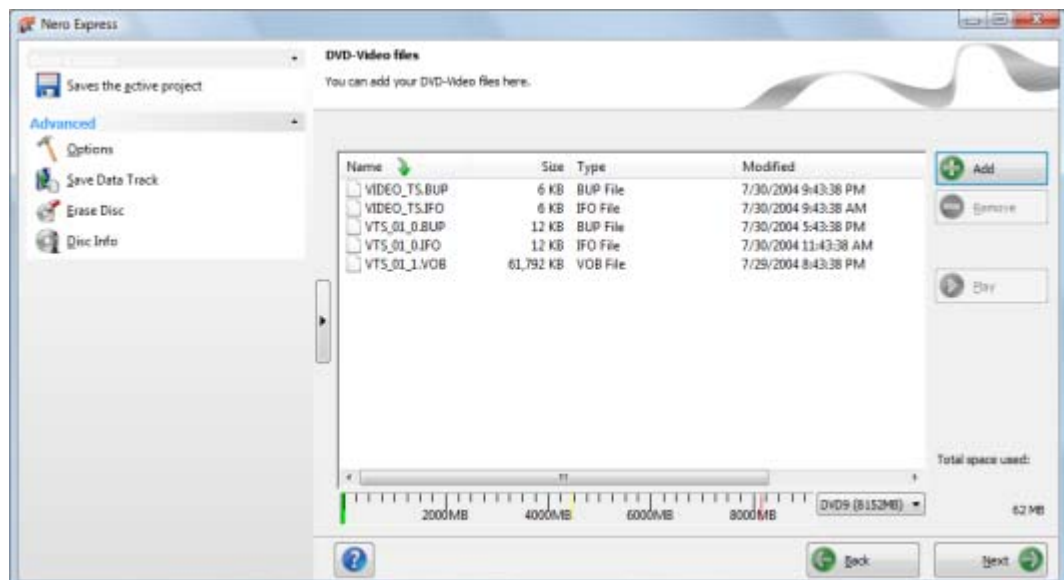
With Nero Express you can burn DVDs made up of DVD-Video files from your hard drive. You can show your burned DVDs on almost all DVD players. You can use Nero Express to burn a DVD if the DVD video title, i.e. a complete DVD folder structure, is already available.



Please note that it is not possible to create a DVD-Video from video files in Nero Express. You can convert video files to DVD-Videos in Nero Vision for example. More information is available in the separate Nero Vision manual.

To compile a DVD-Video, proceed as follows:

1. Click the **Videos/Pictures** 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.



DVD-Video files compilation screen

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. Repeat the two previous steps for all DVD-Video files that you want to add to the compilation.
6. Click the **Close** button.
→ The DVD-Video files are added to the compilation and are displayed in the 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.

7. Click the **Next** button.

➔ You have successfully compiled a DVD-Video and can now burn this compilation.

See also:

 [Burn Compilation→ 25](#)

8 Loading a Disc Image or Saved Project

With Nero Express you can burn a CD/DVD from a disc image 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) 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.

See also:

 [Burn Compilation](#) → 25

9 Burn Compilation

9.1 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.



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.

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. You can therefore create a DVD image, for instance, without having installed a DVD recorder. You can write the image to a disc at any time.

9.2 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:

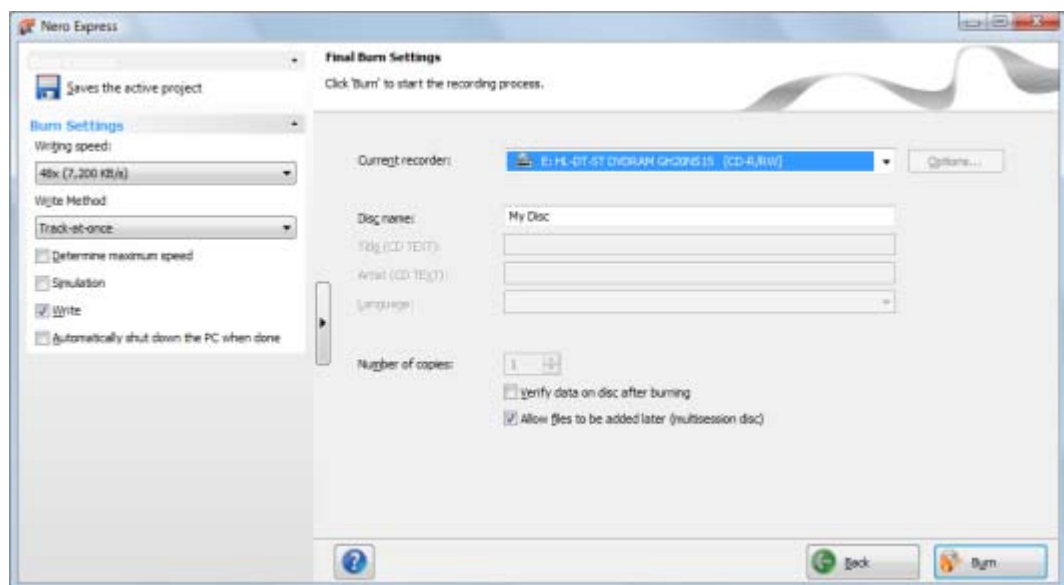
1. Compile a project of your choice.
→ The **Final Burn Settings** screen is displayed.
2. Insert a suitable blank disc in the selected drive.
3. Select the recorder you want from the **Recorder** drop-down menu.
4. Add to the desired values in the input fields as necessary and select the required check 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, the **Nero Ex-**

press dialog box is opened and displays a message about the result of the burn process.

7. Click the **OK** button.
8. If you would like to print or save a log of the burn process, click either the **Print** or **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.

9.3 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 <u>B</u> ook <u>T</u> ype settings. Not available when saving with Nero Image Recorder.
Input field Disc name	Defines the name of the CD/DVD.

Input field Title (CD TEXT)	Defines the title of the Audio CD if CD Text is supported.
Input field Artist (CD TEXT)	Defines the artist on the Audio CD.
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 <u>multisession</u> CDs/DVDs 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 (multisession disc)	Enables the option to write additional files to the CD/DVD. The CD/DVD is not finalized. Multisession CDs/DVDs do not have to be written in a single burn process. You can burn projects repeatedly to a CD/DVD until it is completely burned. Not available for Audio CDs or when saving with Nero Image Recorder.

9.3.1 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-at-once or Track-at-once write method. Using the <u>disc-at-once</u> method the entire CD/DVD can be burned without the write laser having to stop. With the <u>track-at-once</u> method the laser switches off after each track. Available for CD compilations only. By default DVDs are burned using the disc-at-once method.

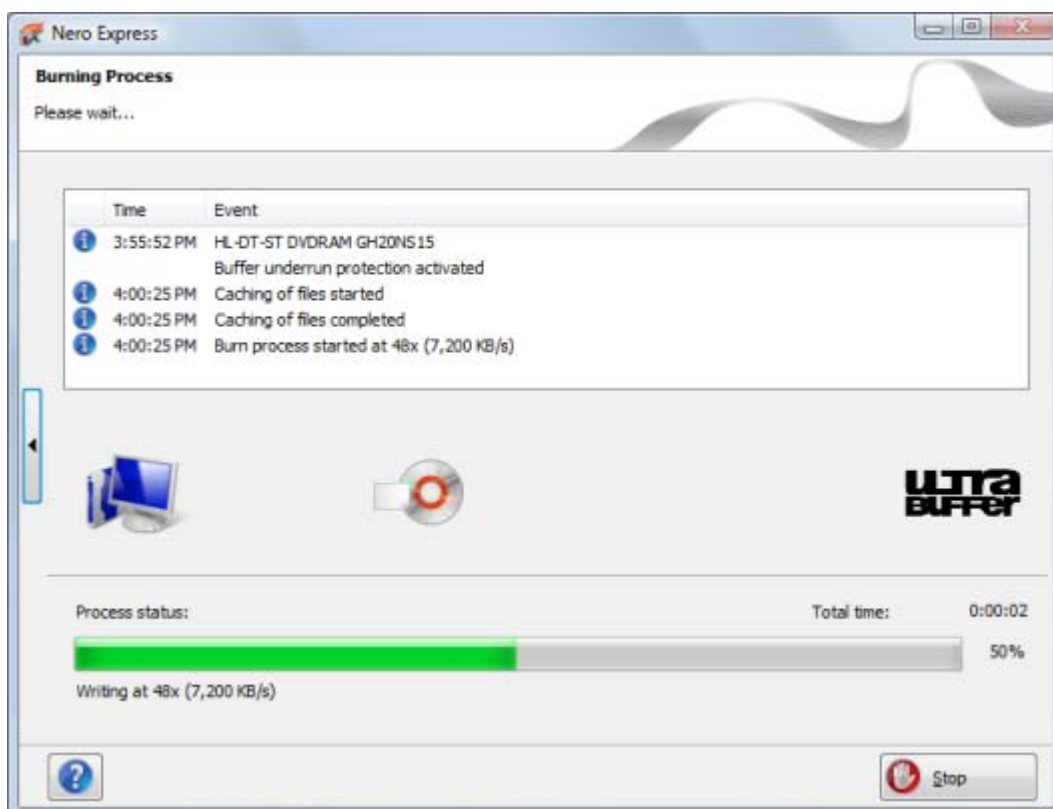
Check box Determine maximum speed	Checks how fast the compiled data can be accessed and reduces the selected writing speed if necessary. This prevents a <u>buffer underrun</u> . Recorders with a feature to prevent buffer underruns do not require a speed test. Not available when saving with Nero Image 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 <u>Audio CD</u> 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 <u>block</u> is filled with silence when needed. 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.

9.4 Creating an Image File

To set the burn settings according to your requirements and to save your project as an image file to the hard drive using Nero 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, the **Nero Express** 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 print or save a log of the burn process, click either the **Print** or **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.

See also:

[Final Screen](#) → 37

10 Copying CDs/DVDs

10.1 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.

10.1.1 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 buffer underrun 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.

10.1.2 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).

10.2 Copying CDs/DVDs

To copy a disc, proceed as follows:



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



Copy-protected Audio CDs cannot be copied using Nero Express.



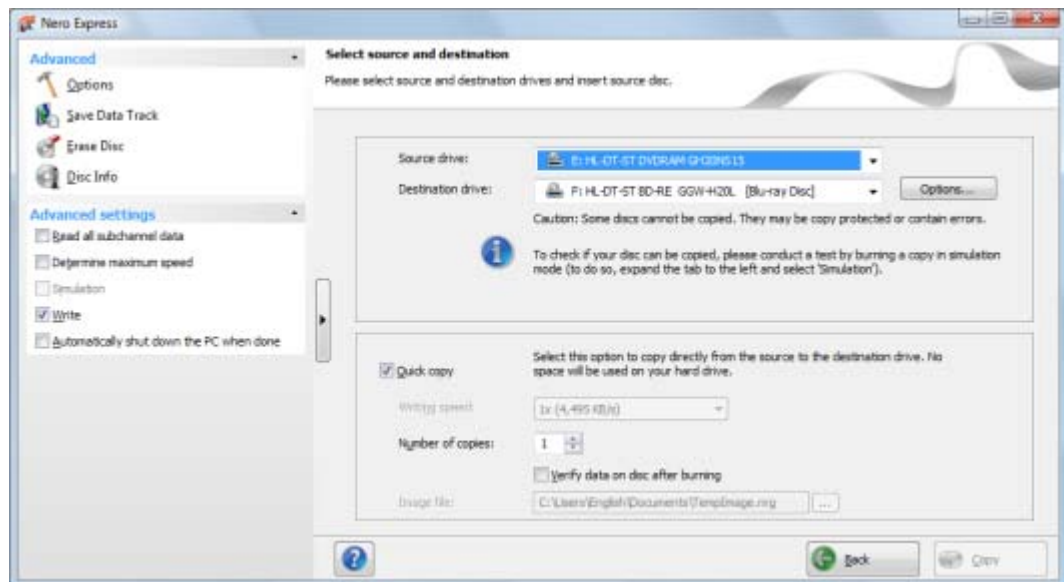
Some CDs/DVDs are copy-protected and cannot be copied. If you are not sure whether your CD/DVD can be copied, activate simulation before commencing the actual physical burn process.

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.
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 CD/DVD 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 CD/DVD and can now continue by selecting another option from the final screen or by closing Nero Express.

See also:

 Final Screen → 37

10.3 Copy Settings



Copy CD/DVD screen

The following configuration options are available in the the **Select 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 <u>On-the-fly</u> 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 CD 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:

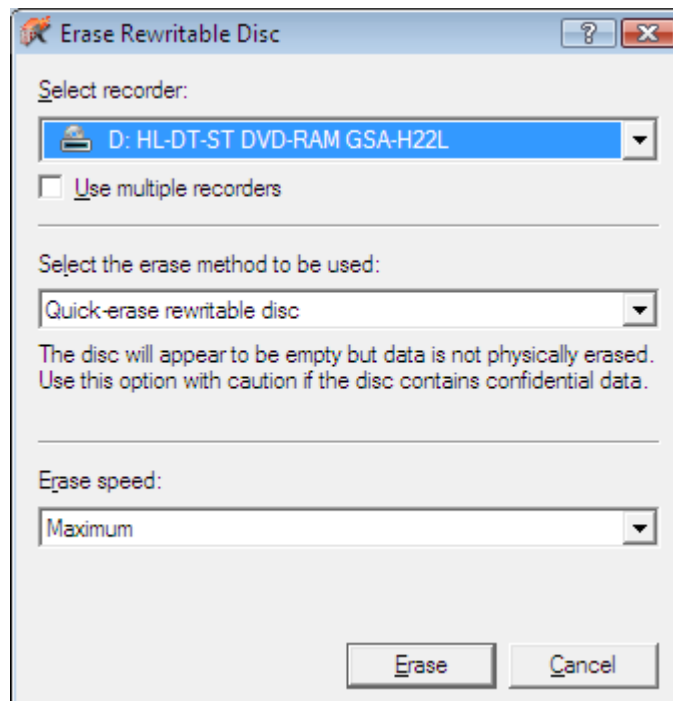
Check box Read all subchannel data	Reads all subchannel data during copying. Subchannel data is used to save additional information, e.g. CD Text.
Check box Determine maximum speed	Finds out the maximum burning speed. Not available for Nero Image Recorder.
Check box Simulation	Performs all steps in the 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 box is checked by default.

11 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.

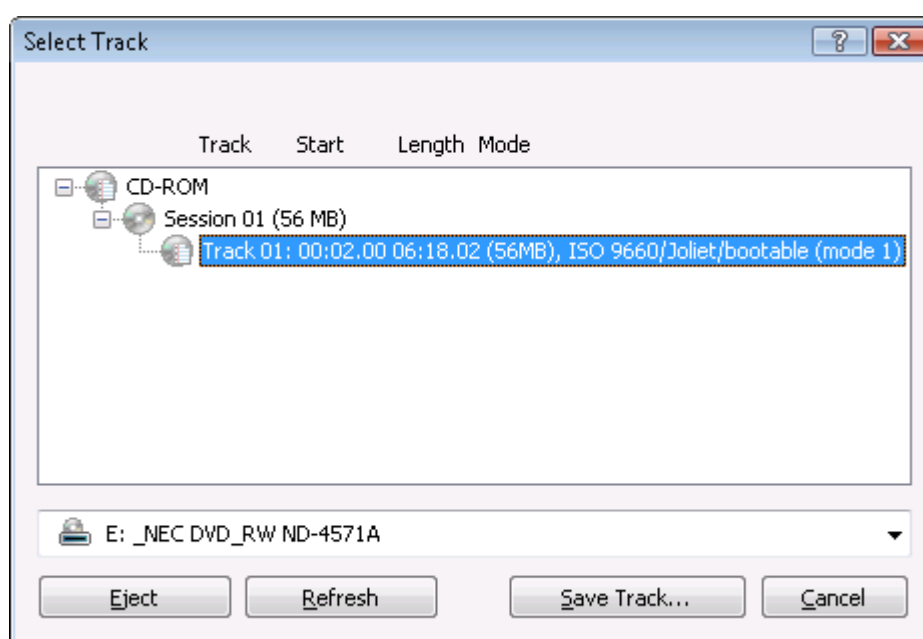
Selection list Select the erase method to be used	<p>Defines the erase method. Two options are available:</p> <p>The Quick-erase rewritable disc method does not physically erase the disc fully, but only the references to the contents. The disc will appear to be empty even though the data is still physically available. Erasing a disc using this method takes between one and two minutes.</p> <p>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 contents. Erasing the disc using this method takes longer than the other method, depending on the type of disc involved.</p>
Selection list Erase speed	Defines the erase speed.
Button Erase	Starts the erase process.
Button Cancel	Cancels the action and closes the window.

12 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.



Select Track

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.

13 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:

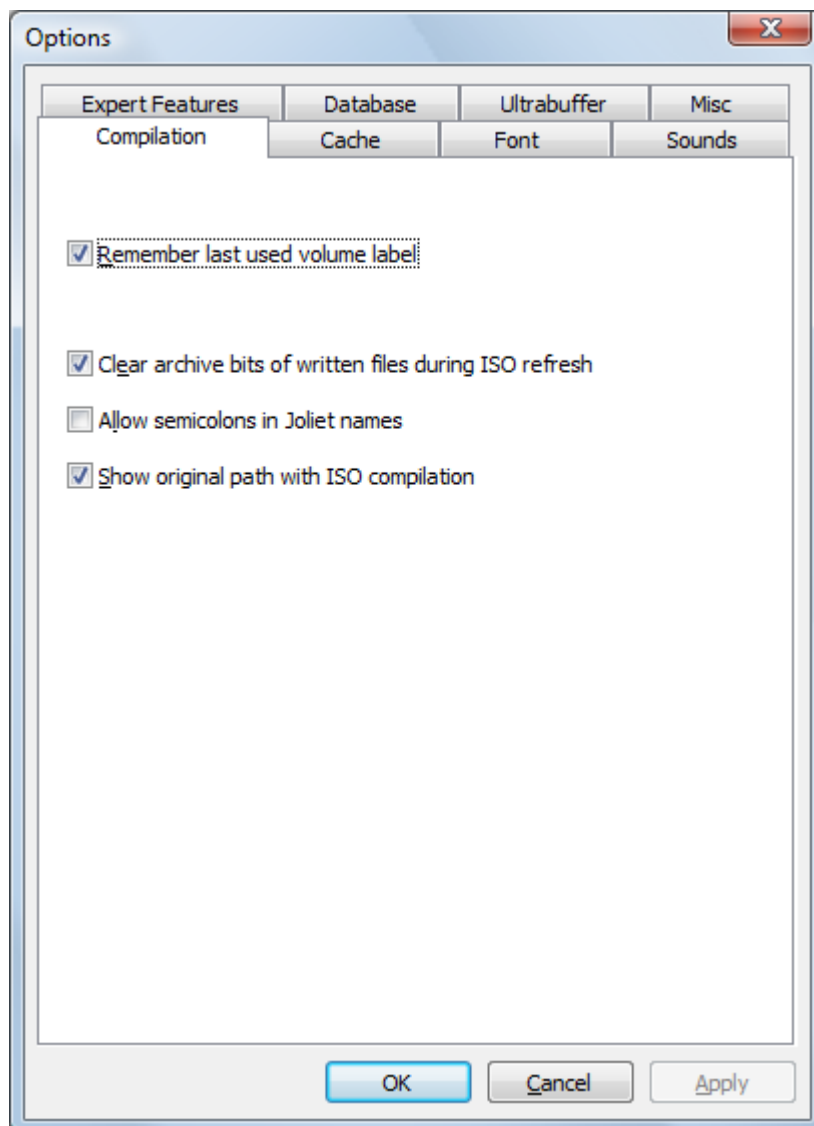
Entry Burn the same project again	Returns to the Final Burn Settings screen. You can burn the same project again with the same or different settings.
Entry New project	Opens the Nero Express start screen. You can create a new project here.
Entry Save project	Opens the Save As window. You can save the current project if you want to access it again later.

See also:

 [Loading a Disc Image or Saved Project→ 24](#)

14 Configuration Options

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



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.
Ultrabuffer	Defines the size of the RAM buffer.
Misc.	Contains options for configuring compilations, burning, the data-base, the user interface as well as advanced settings.

14.1 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 <u>archive bits</u> 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 <u>Joliet</u> 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.

14.2 Cache settings

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

Input field Path for cache	Displays the path of the <u>Cache</u> memory. 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 Minimun space on hard drive, which Nero should not use	Defines a storage volume that is not used by Nero Express.

Check box Drag and drop from CD-ROM drive	Saved files that have been copied from a CD-ROM drive in the clipboard.
---	---

14.3 Expert Features

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

Check box Enable Disc-at-once CD overburning	Enables additional options and defines settings for the entire burn process.
Option button Relative maximum/minimum overburning size	Defines how much a disc can be overburned.
Check box Enable DVD overburning	Enables the option that DVDs can be overburned.
Check box Enable generation of short lead-out	Enables the option to write additional data to your CD. This feature is only available if the Enable Disc-at-once CD overburning option is enabled.
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.

15 Technical Information

15.1 System Requirements

Nero Express is installed along with Nero BackItUp & Burn. Its system requirements are the same. You can find more detailed information on the system requirements under www.nero.com.

15.2 Formats Supported

15.2.1 Disc Types

- CD
- DVD
- Blu-ray - burning only



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

15.2.2 Disc Formats

- Audio CD
- DVD-Video

16 Glossary

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.

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.

Blu-ray

Blu-ray technology refers to burning on special data carriers. In comparison to DVD's, which use a red laser in order to read and write data, Blu-ray discs are written with a blue laser. The shorter wavelength (405 nm) of this blue laser makes it possible to position the laser with greater accuracy. Data can be written in a more compact manner and takes up less space on the disc. A Blu-ray disc can store up to 25 GB on a single layer disc and up to 50 GB on a dual layer disc.

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 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 re-recording Audio CDs you would like to play on 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 for a complete disc. A disk 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.

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 and the ß.

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.

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.

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.

SecurDisc

SecurDisc refers to a security technology that protects data carriers from unauthorized access and duplication. SecurDisc can only be burned and password protected with a SecurDisc drive. Access with other drives is only possible to a limited extent. The following disc formats are supported, although without the copy protection feature: DVD+R(W), DVD+-R DL, DVD-RAM and CD-R(W).

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.

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18 Contact

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