

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.

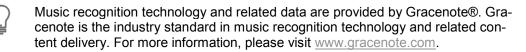
Å	Indicates warnings, preconditions or instructions that have to be pre- cisely followed.
Ŷ	Indicates additional information or advice.
1. Start	The number at the beginning of a line indicates a prompt for action. Carry out these actions in the order specified.
\rightarrow	Indicates an intermediate result.
→	Indicates a result.
ок	Indicates text passages or buttons that appear in the program inter- face. 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.

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

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.

With Nero Express that is included in Nero Multimedia Suite 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.





Start Successfully

1.3 Versions of Nero Express

Nero Express is available in versions with different features.

The full version of Nero Express in Nero Multimedia Suite, or Nero Multimedia Suite Platinum HD, provides the complete range of functions, including multimedia features such as saving audio tracks and burning BD-Videos. Nero Express in Nero BackItUp & Burn provides a limited feature set, based on the most common data burning use cases.

Nero Express in Nero BurnExpress provides basically the same feature range as the full version of Nero Express in Nero Multimedia Suite or Nero Multimedia Suite Platinum HD.

The following features are limited to a trial version:

- Music title recognition with Gracenote
- Support of Album art with Gracenote

You will need the Gracenote Plug-in to use the Gracenote features permanently. You can obtain the plug-in at <u>www.nero.com</u>.

In addition, different versions of Nero Express Essentials are available. Essentials or OEM software may differ from the full version in a more or less broad functional range. The feature limitations of your single Essentials version are determined by the contract partner from whom you purchased your copy.

Nero Express Essentials in Nero Multimedia Suite does not offer the following features compared to the full version:

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

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.

The plug-in can be added to Nero Multimedia Suite. You can obtain the plug-in at <u>www.nero.com</u>. The plug-in is already included in the full version.

Nero Express in Nero BackItUp & Burn does not offer the following features compared to Nero Multimedia Suite:

- Creating labels with LightScribe (not included in the standard functions)
- Creating labels with Labelflash (not included in the standard functions)
- Saving audio tracks to the hard drive



Start Successfully

- Music title recognition with Gracenote
- Support of Album art with Gracenote
- Compiling AVCHD disc
- Compiling BD-Video

Nero Express Essentials in Nero BackItUp & Burn does not offer the following features compared to the full version in Nero BackItUp & Burn:

Full SecurDisc functionality

) 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 <u>www.nero.com</u>. The plug-in is already included in the full version of Nero Express in Nero Multimedia Suite or Nero Multimedia Suite Platinum HD.

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.

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.



Starting the Program

2 Starting the Program

To start Nero Express, proceed as follows:

- If you use Nero Multimedia Suite or Nero Multimedia Suite Platinum HD and have Nero StartSmart available:
 - 1. Click the Nero StartSmart desktop icon.
 - \rightarrow The Nero StartSmart window is opened.
 - 2. Click the () button.

 \rightarrow The list of Nero applications is displayed.

- 3. Select the Nero Express entry in the selection list.
- → The Nero Express window is opened.

🔘 Nero StartSmar	rt						
nero Multimedia S	uite 10	Music	Video - Photo	Data	Tools	Knowledge Center	
Quick Tasks Data Burning Audio Burning Audio Ripping Copy Disc	Your command	e above category	tSmart ur digital media pr tabs to launch appli the left for easy one	cations for each pro		arted:	
NEWS	Upgrade T	oday and Save!		Buy Ner	o 9 and get 3 Free.		Next
							7

Nero StartSmart window

- 2. If you use Nero BackItUp & Burn:
 - 1. Click the O Nero BackItUp desktop icon.
 - \rightarrow The Nero BackItUp window is opened.
 - 2. Click the 🗱 Burn CDs, DVDs, Blu-ray Discs icon
- If you use Nero BurnExpress, click Start (the start icon) > (All) Programs > Nero > Nero 10 >Nero Express.
 - \rightarrow 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. The selection is categorized into two areas: several formats or options are available for the single compilation methods.

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

😴 Nero Express		
Nero Express Switch to Nero Burning ROM Advanced	Data	Data CD Create a standard data disc which can be used to save all types of files and complete folders. The disc can be read on all Windows platforms.
∫ <u>O</u> ptions Save Audio Iracks	J.	Data DVD Create a data DVD which can be used to save all types of files and folders. The DVD can be read on all Windows platforms.
Save Data Track Image: Seve Data Track Image: Seve Disc Image: Disc Info	Music	Blu-ray Data Disc Create a Blu-ray disc which can be used to save all types of files and folders. The disc can be read on all Windows platforms.
Create Covers and Labels	Videos	SecurDisc Data CD Create a Data CD using SecurDisc. Improve the security and reliability of your data.
Seject the Recorder to burn on: F: HL-DT-ST BD-RE GGW-H20L Use Image Recorder	Image, Project, Copy	SecurDisc Data DVD Create a Data DVD using SecurDisc. Improve the security and reliability of your data.
	Print LightScribe Label	Blu-ray Data SecurDisc Create a Blu-ray Disc using SecurDisc. Improve the security and reliability of your data.

Start Screen

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	lows 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. Only available in the full version of Nero Express in Nero Multimedia Suite.			



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

 \bigcap

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

See also

- \hfill Loading a Disc Image or Saved Project $\rightarrow 43$
- \Box LightScribe \rightarrow 44
- \blacksquare Data Disc \rightarrow 15
- \blacksquare Music \rightarrow 22
- \Box Video \rightarrow 38

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:

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 compila- tion 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. Only available with Nero Multimedia Suite.
Opens the Save As window to save your compilation. The file links and settings to be burned are saved.
Opens the Options window to customize Nero Express to suit your requirements.
Opens the Copy Audio CDs to Hard Drive to copy audio files from CD to the hard drive. Only available with Nero Multimedia Suite.
Opens the Select Track window in which you can save the track of a data disc as an image file.
Opens the Erase Rewritable Disc window to erase data from a re- writable disc.



Start Screen

Disc Info	Opens the Disc Info window to display information about the in- serted 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. Only available with Nero Multimedia Suite.
SecurDisc Settings	Defines the settings for burning a SecurDisc disc.
	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.
Burn Label	Available with a Labelflash recorder only. The recorder must be se- lected to enable the option. Only available in the full version of Nero Express in Nero Multimedia Suite.
Recorder	Defines the recorder that you want to use for burning and/or the Nero Image Recorder.

See also

- \Box Configuration Options \rightarrow 71
- \Box Copy Audio CDs to Hard Drive \rightarrow 34
- Erase Rewritable Disc Window $\rightarrow 64$

Compilation Screen

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.

📿 Nero Express						
Nero Express *	Disc Content					
Saves the active project	Add data to your disc.					
Advanced *	New				- 15 15 15	
√ Options ∰ Save Audio Iracks	Name	Size	Туре	Modified	Origin	🔂 Add
😥 Save Data Track						Benove
💣 Erese Disc						
🐺 Greate Covers and Labels						Bay
						Total space used:
	•					
	100MB 20	IDMB 300MB	ADIMB SI	IOMB 600MB	700MB S00MB	0.118
	0				G Dack	Next 🕥

Compilation screen

The following setting options are available in the compilation screen:

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.



Compilation Screen

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 par- ticularly 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 with- out 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 (8.5 GB) / DVD5 (4.7 GB)	Allows you to expand or shrink the capacity bar according to the type of DVD you are going to burn. Choose the DVD9 (8.5 GB) option for a double layer DVD (DVD DL) and DVD5 (4.7 GB) for a single layer DVD. Available for all DVD compilations.
Selection list BD QL (BDXL) (128 GB) / BD TL (BDXL) (100 GB) BD DL (50 GB) / BD (25 GB)	Allows you to expand or shrink the capacity bar according to the type of Blu-ray Disc you are going to burn: BD QL (BDXL) (128 GB) for a quadruple layer Blu-ray Disc, BD TL (BDXL) (100 GB) for a triple layer Blu-ray Disc, BD DL (50 GB) for a double layer Blu-ray Disc (BD DL) and BD (25 GB) for a single layer Blu-ray Disc. Available for all Blu-ray Disc compilations except BD-Video.



Actual capacity of media formats

The actual capacity of the DVD5, DVD9, BD DL, and BDXL media formats is less than as stated by the disc manufacturers. For example, the actual capacity of a 4.7 GB DVD5 is around 4.38 GB only.

This is because of different conversion systems. A DVD5-media format can handle 4.700.000.000 bytes, but this number is not equal to the 4.7 GB stated by the disc manufacturers. The correct conversion factor for bytes is not 1000, but 1024: 1024 byte = 1 KB

1024 KByte * 1024 KByte = 1 MB

1024 KByte * 1024 KByte * 1024 KByte = 1 GB

A DVD can handle 4.700.000.000 bytes:

4.700.000.000 bytes = 4.589.843 KB = 4.482 MB = 4.377 GB

The capacity bar in Nero Express will always show you the correct amount of bytes measured in MB or GB.







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

See also

 \Box Compilation Settings \rightarrow 72



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.



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

To create a data disc, proceed as follows:

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

🗮 Nero Espress				
Nero Express	Disc Content Add data to your disc.			
				-
Advanced	· New		- 1	6 🖬 Ka
Coptions	Name	Size Type	Modified Origin	Add
Save Data Track				Benove
Ernon Disc				
Oisc Info	0			Bay
🐺 Greate Covers and Labels				C Dat
				Total space used:
	100MB 20	OME 300MB 400MB 5	00MB 600MB 700MB	STEMB DM
	0		0	Dack Next

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.



- \rightarrow 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.

See also

 \blacksquare Compilation Screen \rightarrow 12

5.2 Compiling SecurDisc disc

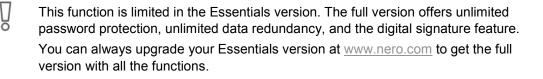
SecurDisc is a technology with which you can create discs with special protection properties. No special hardware is needed.

Discs that are created with Nero Express and the SecurDisc compilation type include data integrity and reconstruction. Additional SecurDisc features include the possibility to protect the data on your disc against unauthorized access using a password, to digitally sign the disc, and to configure the data redundancy.

To be able to copy the protected data to your hard drive and to check the security of the data you will need a special application named Nero SecurDisc Viewer. The Nero SecurDisc Viewer is burned automatically to the SecurDisc disc and can be downloaded free of charge at <u>www.securdisc.net</u> or <u>www.nero.com</u>.



More information on SecurDisc technology can be found at <u>www.securdisc.net</u>.



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.
- **2.** Click the SecurDisc option you require.
 - → The Disc Content compilation screen for SecurDisc discs is displayed.

Save Audio Iracks		data to your disc.					
Erase Disc	6	My Disc				- 18 🖬 🖏	
Disc [nfo Create Covers and Labels	F	Name	Size	Туре	Modified	Origin	🚱 Add
ecurDisc settings							Benove
Password protection	A						
Digital signature							0
Data reliability							🕑 Bey
© Good	•						
Very good							Data Reliability Leve
Egcellent (Unlimited)							
ecurDisc always includes:							rrr/Nonerrrr
Data integrity check							
- Data reliability							Total space used:
0							
SecurDisc"		2 GB	4 GB	6 GB	8 GB	DVD9 (8152M8)	0 68
Set more information	-	2				C Lack	

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.
 - \rightarrow 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:
 - 1. Select the **Password protection** check box in the extended area of the compilation screen.
 - \rightarrow A lock symbol shows that all data is protected.
 - \rightarrow If you enabled the Password protection feature, the SecurDisc Protect Data window is opened.



SecurDis	c - Protect Data		×
<u> </u>	access. For security reasons the long and should contain the long area.	rotect the marked data against unauthone password should be at least 16 chara In letters and numbers. In sentences to be used as a password.	
		our password! Without it you will be un issword protected documents.	able
	Password:	📝 <u>H</u> ide typing	
	***		*
	Password quality:		
		Weak	
	Password confirmation	:	
	****		*
			-
		OK Canc	el

2. 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.

- 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.
 - \rightarrow The SecurDisc Digital Signature window is opened.



SecurDi	sc - Digital Signature
<u></u>	To digitally sign the disc you need a key.
<i></i>	Please select a private key from the list below. Keep this key confidential and do not distribute it.
	Send only the corresponding public key to the disc recipient.
	▼
	Browse
	Nero can create a digital key for you in case you do not have one or you want to create a new one.
	Start
	OK Cancel

- 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.
 - \rightarrow 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.



- **9.** If you want to enhance the burning speed by limiting the data redundancy or to configure the data redundancy:
 - 1. Select the Data redundancy check box in the extended area of the screen..
 - \rightarrow The option buttons are enabled.
 - 2. Select the desired reliability level.



If the **Data redundancy** 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.
 - 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.

Select Track
Track Start Length Mode
E
🗄 🍘 Session 01 (56 MB)
🚔 E: _NEC DVD_RW ND-4571A 🗸 🗸
Eject <u>R</u> efresh <u>S</u> ave Track <u>C</u> ancel

Select Track



- **3.** Select the first data track.
- 4. Click the Save Track button.
 - \rightarrow The **Save As** window is opened.
- **5.** Select a file name and a storage location.
- 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.



6.1 Compiling Audio CDs

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Some of the functions mentioned here are restricted or not available in the Essentials version. You can always upgrade your Essentials version at <u>www.nero.com</u> 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 <u>www.nero.com</u> 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.

The plug-in can be added to Nero Multimedia Suite. You can obtain the plug-in at <u>www.nero.com</u>. 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.
 - \rightarrow The compilation methods for music are displayed.
- **2.** Click the **Audio CD** button.
 - → The **My Audio CD** compilation screen for Audio CDs is displayed.



Music

Nero Express	• My Audio CD			
aves the active project	Audio CDs.	to burn. You can add audio files from γ	our hard drive or tions	
Advanced	* T Title		Testinent	
1 Options	I litte	Artist	Track Length	Add
Save Audio Tracks				Benzve
Save Data Track				
Trace Disc Disc Info	1000			D Elay
Greate Covers and Labels				Properties
				Normalize al audio
				No payse between
	20m	n 40min	50min 80min	Total time 0:00
	0		G Dack	Next 🌒

My Audio CD compilation screen

- 3. Click the Add button.
 - \rightarrow 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.
 - \rightarrow The audio files are added to the compilation and displayed in the compilation screen.

Nero Express	+ My Au	dio CD				
🔜 Saves the active project	Add the Audio C		files you want to burn. You can	add audio files from your hard dri	ve or from	<u> </u>
Advanced						
1 Options		1	Title	Artist	Track Length	Add
		1	Beethoven: Symphony #1.	Barry Wordsworth: Royal	19:13	•
Save Audio Tracks		2	Beethoven: Symphony #1.		88:26	Eenove
Save Data Track		3	Beethoven: Symphony #1.		03.21	
		4	Beethoven: Symphony #1.		05:50	
Erase Disc		5	Beethoven: Symphony #2 .		13:03	0
Disc Info	1000			Barry Wordsworth: Royal	11:30 13:43	D Elay
Greate Covers and Labels		1		Barry Wordsworth: Royal Barry Wordsworth: Royal	16:29	Properties
						Normalize al aud Files No page betwee
						trads
			20mm	40mm 60mm	1 1 1 1 1 80min	Total tin 61:
	0	1			C Lack	Next 🕥

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

 \blacksquare Compilation Screen \rightarrow 12

Copy Audio CDs to Hard Drive \rightarrow 34

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 **Properties** button.

rack Properties	Indexes, Limits, Split Filters		
B	Source information		
	File:	MP3 44100HZ 192KBts S	tereo Track No14.mp3
-	Frequency:	44,100 Hz	
	Channels:	2	
	Resolution:	16 bits	
Description			
Properties Title (CD TE)	(T):	MP3 44100HZ 192KBits S	Stereo Track No14
Artist (CD TE	XT):	MP3 44100HZ 192KBits 5	Stereo Track No14
Pause:		2	Seconds
International (ISRC):	Standard Recording Code		
Protection:			
Cross fade w	th previous track:	0	Seconds *

Track properties

Music

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

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

	ies			-?
rack Properties In	ndexes, Lin	nits, Split Filters		
Oscilloscope				
alda handat	MINIA I	lituli dil tativiti cui	ktil <mark>taltalita ktisadin infilia kanta dan</mark>	II CANTAL CITATA DI M
nall body	in the second se	addir dal la balal cum	and chard a data that had the second	March 1997
k-0.00.00				3.53.42->
WALLOW DO AND	i della d	a a historia da ini ina an	dini ini mali na dina di lini dia mbatani ina	i i Kashi kashi bahiri i i
Trail Lorent			والاعتريمي الأرباط والمرواب والأرباط الرزج	
Antina data an te		an na sana na shikari	lain, an ta da Managana ka an ta dha an ta an ta	Kadionalutikon albitual. Ji
	i mangapang	an na standar an	la fa ann an 1950 ann an 1970 an 1970 ann an 1970. Iadhraidh an 1970 ann an 19	
Postions		an a sharar ta shekarar 1994 ya shekarar 1	larin ana ani ni Krimmer na ina mari ani familana dan	
Postions 0:00.00 (Start)		New Index	Split Play	
< Positions		New Index	Split Play	, Zoom in
Postions 0:00.00 (Start)				•
Postions 0:00.00 (Start)		New Index	Split Play	, Zoom In
Postions 0:00.00 (Start)	*	New Index	Split Play	Zoom In Zoo <u>m</u> Out
Postions 0:00.00 (Start)	*	New Index	Split Play	Zoom In Zoo <u>m</u> Out

Indexes, Limits, Split Tab

Music



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 fea- ture.
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 Posi- tions	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 Track Properties Indexes, Limit	Solit. Filters
Nomalize Declick Hiss Reduction Fade In Fade Out Stereo Widening Karaoke Echo Equalizer	Normalization method: RMS Percent: 20 This filter may be used to set the volume of a track to a standard volume. It may be useful to adjust the volume of several tracks that were read from different sound input devices. The RMS method (root-mean-square) sets the mean volume of the track to the given value. The maximum method sets the volume to a value which avoids clipping.
Test Selected Filters	0
	OK Cancel Apply

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 be- low 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 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 AAC 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 juke-box 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
- \blacksquare Compiling Data Disc \rightarrow 15

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 <u>www.nero.com</u>. The plug-in is already included in the full version of Nero Express in Nero Multimedia Suite or Nero Multimedia Suite Platinum HD.

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 <u>www.gracenote.com</u>.

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 <u>www.nero.com</u> to get the full version with all the functions.



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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 <u>www.nero.com</u>. The plug-in is already included in the full version of Nero Express in Nero Multimedia Suite or Nero Multimedia Suite Platinum HD.

To do this, proceed as follows:

- **1.** Select the type of compilation to burn a music CD.
 - \rightarrow 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.

D:\Testdaten\Audio	o (Barry Words) o (Barry Words)	worth_Royal Philharmoni				Status
D: \Testdaten \Audio	o Barry Wordsv	Contraction of the local division of the loc	c Orchestra-Beethoven	Symphonies [Disc 1]	01 - Barry	Exact
		vorth_Royal Philharmoni	c Orchestra-Beethoven			Exact
D: \Testdaten \Audio		worth_Royal Philharmoni				Exact Exact
	Track:	2	New Info	Trade:	2	
	Track: Title:	2 Beethoven:	New Info	Track: Title:		n: Symphony #1 In C. On. 21
	Tide:	Beethoven:	New Info	Title:	Beethover	
	Title: Artist:	Beethoven: Barry Wordsworth:	New Info	Title: Artist:	Beethover	
	Tide:	Beethoven:	New Info	Title:	Beethover Barry Wor	
tadata synchronized d Info	Title: Artist:	Beethoven: Barry Wordsworth:	New Info	Title: Artist:	Beethover Barry Wor	

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

This function is only available in Nero Express that is included in Nero Multimedia Suite.

If you use Nero BackItUp & Burn you can always upgrade to Nero Multimedia Suite at <u>www.nero.com</u> to get all the multimedia functions.



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.



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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 <u>www.nero.com</u> 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.

The plug-in can be added to Nero Multimedia Suite. You can obtain the plug-in at <u>www.nero.com</u>. 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.
 - → The Edit MetaData window is opened.



Track	Title	Artist	Length	Album:
1	Beethoven: Symphony #1 In C	Ludwig Van Beethoven	00:09:13	Symphonies No. 1 & 2
2	Beethoven: Symphony #1 In C	Ludwig Van Beethoven	00:08:25	
3	Beethoven: Symphony #1 In C	Ludwig Van Beethoven	00:03:21	Album Artist:
4	5. #1 C-Dur (op. 21) 4. Adagio		00:05:50	Ludwig Van Beethoven
5	Beethoven: Symphony #2 In D		00:13:03	Year:
6	Beethoven: Symphony #2 In D		00:11:30	Tear:
7	Beethoven: Symphony #2 In D	Ludwig Van Beethoven	00:03:43	
8	S. #2 D-Dur (op. 21) 4. Allegro	Ludwig Van Beethoven	00:06:29	Genre:
				Browse

Edit Metadata

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.

- 5. Edit the audio track metadata (Title and Artist) by clicking in the track list.
- **6.** Edit the Audio CD metadata (**Album Title**, **Artist**, **Year** and **Genre** as well as **Album Art**) on the right side.
- **7.** 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.
- 8. 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.

Sgurce driv	e:	F: HL-DT-ST BD-R	E GGW-H20L		•	Sefresh
	Title		Artist	Length	Copy Status	F Edt
1	Beethoven: Symphony	#1 In C, Op. 21 - 1	Barry Wordsworth: Roy	09:13		Of Frank
2	Beethoven: Symphony			08:25		Album:
3	Beethoven: Symphony	#1 In C, Op. 21 - 3	Barry Wordsworth: Roy	03:21		Beethoven: Symphonies [C
4	Beethoven: Symphony	#1 In C, Op. 21 - 4	Barry Wordsworth: Roy	05:50		Artist:
V 5	Beethoven: Symphony	#2 In D, Op. 36 - 1	Barry Wordsworth: Roy	13:03		Barry Wordsworth: Royal F
V 6	Beethoven: Symphony	#2 In D, Op. 36 - 2	Barry Wordsworth: Roy	11:30		
7	Beethoven: Symphony	#2 In D, Op. 36 - 3	Barry Wordsworth: Roy	03:43		Year:
V 8	Beethoven: Symphony	#2 In D, Op. 36 - 4	Barry Wordsworth: Roy	06:29		1996
						Genre:
						Other Classical 🔹
						S
0	000	0				Load Cover

Save Audio Tracks to Hard Drive

- **9.** Select the tracks that you want to save on the hard drive.
- **10.** Click the **Output** tab.
 - \rightarrow The **Output** tab is opened.
- **11.** In the **File Format** drop-down menu, select the target file's audio format.
- Choose a method for creating the file name in the Mode for Creating File Names dropdown menu.
- **13.** Define other settings according to your preferences.
- 14. 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.
- **15.** 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**.

Out Out	tput					
Source driv	ve:	F: HL-DT-ST BD-R	E GGW-H20L		•	Befresh
7	Title		Artist	Length	Copy Status	Edt
V 1	Beethoven: Symphony	#1 In C, Op. 21 - 1	Barry Wordsworth: Roy	09:13		
2	Beethoven: Symphony	#1 In C, Op. 21 - 2	Barry Wordsworth: Roy	08:25		Album:
3	Beethoven: Symphony	#1 In C, Op. 21 - 3	Barry Wordsworth: Roy	03:21		Beethoven: Symphonies [C
4	Beethoven: Symphony	#1 In C, Op. 21 - 4	Barry Wordsworth: Roy	05:50		Artist:
V 5	Beethoven: Symphony	#2 In D, Op. 36 - 1	Barry Wordsworth: Roy	13:03		Barry Wordsworth: Royal F
V 6	Beethoven: Symphony	#2 In D, Op. 36 - 2	Barry Wordsworth: Roy	11:30		
7	Beethoven: Symphony	#2 In D, Op. 36 - 3	Barry Wordsworth: Roy	03:43		Year:
78	Beethoven: Symphony	#2 In D, Op. 36 - 4	Barry Wordsworth: Roy	06:29		1996
						Genre:
						Load Cover
0	0000	0			00:00:00	

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

 $\hfill \ensuremath{\square}$ Compiling Audio CDs \rightarrow 22



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 com- pletes the Audio CD's metadata including artist, title name, and ge- nre 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.



Music



6.4.1.2 Output Tab

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

urce Output			
Target			
Output directory:	C:\Users\Administrator\Music		Browse
File name creation mode:	Track number - Title - Artist	•	
Automatically generate a playist of	of stored audio tracks		
Playlist format:	M3U	•	
Format			
File (ormat:	Nero Digital Audio (*.mp4)	•	
Quality:	Nero Digital 128 kbps	-	
Nero Digital Audio + Features			
Force compatibility with Pod			
MP3 Features			
Disable ID3v2 Unsynchronization			
Album Art			
🗹 Add Album Art to file if available			
		SODY	Cancel

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 loca- tion.
Drop-down menu Mode for creating file name	Selects the method to be used for creating the name of the out- put file.
Check box Automatically generate a playlist of stored au- dio 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.



Music

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 <u>Nero AAC Audio</u> , MP3 <u>Audio</u> , 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 <u>mp3PRO</u> file. Only available if you selected the Nero AAC Audio or MP3 Audio file format.
Check box Force compatibility with iPod	Makes Nero AAC Audio available for an iPod. Is only available if you selected the Nero AAC Audio output format.
Check box Disable ID3v2 Unsyn- chronization	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

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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. Nero Vision is included in the full version of Nero Multimedia Suite. More information about Nero Vision is available on the Web site <u>www.nero.com</u>, 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.
 - \rightarrow 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.
- 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.

Video

Video

Vero Express	 DVD-Video files 					
🔜 Saves the active project	You can add your DVD-Video	files here.			-	
Advanced						
🔨 Options 🛃 Save Audio Iracks	Name	Size	Туре	Modified		Add
Save Data Track	VIDEO_TS.BUP VIDEO_TS.IFO VIDEO_TS.IFO	6 KB 6 KB 12 KB	Backup File of the L. DVD movie info Backup File of the L.	7/30/2004 9:43:38 PM 7/30/2004 9:43:38 AM 7/30/2004 5:43:38 PM	Dt\Te Dt\Te Dt\Te	Benove
🧭 Ernse Disc 🞯 Disc Info	VTS_01_0.FO		DVD movie info DVD movie	7/30/2004 11:43:30 AM 7/29/2004 8:43:38 PM	Di\Te Di\Te	Ø Bay
ुरास्वरेष Covers and Labels	·					
						Total space used:
	2001MB	4000MS	17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ICOJMB DVD9 (B152	+ (946) •	62 ME
	0			C Deck		Next 🌒

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

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 \blacksquare Compilation Screen \rightarrow 12

7.2 Compiling AVCHD Video Disc

This function is only available in Nero Express that is included in Nero Multimedia Suite.

If you use Nero BackItUp & Burn you can always upgrade to Nero Multimedia Suite at <u>www.nero.com</u> to get all the multimedia functions.

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.



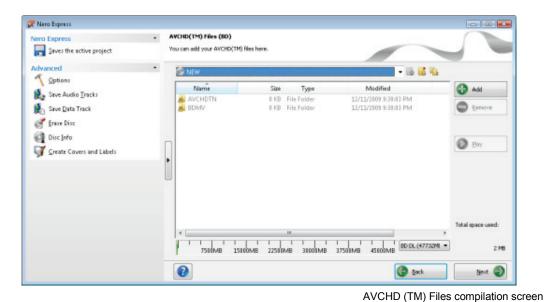
In Nero Express it is not possible to create a DVD-Video, an AVCHD video, or a BDMV-Video from video files. You can convert video files to DVD-Video, to AVCHD video, or BDMV-Video in Nero Vision for example. Nero Vision is included in the full version of Nero Multimedia Suite. More information about Nero Vision is available on the Web site <u>www.nero.com</u>, 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.
 - \rightarrow The video options are displayed.

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- 2. Click the AVCHD(TM) Files (BD) or AVCHD(TM) Files (DVD) option.
 - → The AVCHD(TM) Files compilation screen is displayed.



- **3.** Click the **Add** button.
 - → The Add files and folders window is opened.
- 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.



Video

7.3 Compiling Blu-ray Video Disc

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This function is only available in Nero Express that is included in Nero Multimedia Suite.

If you use Nero BackItUp & Burn you can always upgrade to Nero Multimedia Suite at <u>www.nero.com</u> to get all the multimedia functions.

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. Nero Vision is included in the full version of Nero Multimedia Suite. More information about Nero Vision is available on the Web site <u>www.nero.com</u>, 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.
 - \rightarrow The video options are displayed.
- **2.** Click the **BD-Video Files** option.
 - → The **BD-Video Files** compilation screen is displayed.

Nero Express	. BDMW Files			
Saves the active project	You can add your BD-Wdeo file	s here.		<u> </u>
Advanced	* NEW		• iii iii ii	1 · · · · ·
✓ Options ★ Save Audio Tracks	Name	Size Type	Modified	🔂 Add
Save Data Track	CERTIFIC	0 KB File Folder 0 KB File Folder	12/11/2009 9:30:25 PM 12/11/2009 9:30:25 PM	Estave
💣 Ernse Disc ன Disc Info				
Greate Covers and Labels				D Bay
				Total space used:
	7500MB 1500	0MB 22500MB 30003MB	37501MB 45100MB	я. т 2М
	0		G Dack	Next 🌖

BD-Video files compilation screen



- 3. Click the Add button.
 - → The Add files and folders window is opened.
- 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\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.

Video

Loading a Disc Image or Saved Project

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.
 - \rightarrow The copy and disc image options are displayed.
- 2. Click the Disc Image or Saved Project option.
 - \rightarrow The **Open** dialog window is opened.

Nero Express Switch to Nero Burning Advanced	Copen	rator 🖡 Doc		▼ 4 9 S	earch	عدد م ت	
Qptions Save Audio Tracks Save Qata Track Save Qata Track Frase Disc Disc Joho Track Covers and Labe Recorder Select the Recorder to burn o FiHL-DT-ST BD-RE GO Use Image Recorder	Favorite Links	Name My Mus My Pict My Vide Nero SecurDi	ures	Туре	Size	Tegs	d anto the haid dave.
	File name	1		•	All Supported Co	Cancel	-

- **3.** Select the image file (*.nrg, e.g.) or saved compilation you want and click the **Open** button.
 - \rightarrow 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 LightScribe recorder you can create or load labels that you can burn onto the label side of CDs/DVDs in the LightScribe 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 the full version of Nero Express that is included in Nero Multimedia Suite.

You can always upgrade your Essentials version or your version of Nero BackItUp & Burn at <u>www.nero.com</u> to get all the functions.

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

See also

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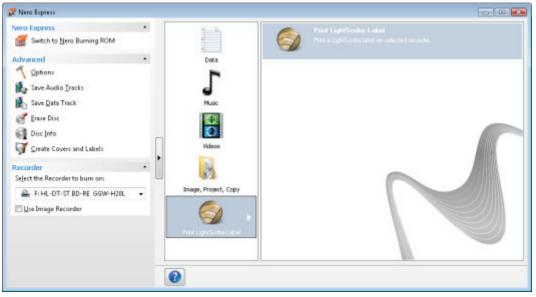
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 \blacksquare LightScribe Settings \rightarrow 75

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.

Nero Express		
dvanced Sptions	Disc Label Create disc label.	
Save Audio Tracks	I + 0 × 3 9 €	1 📈 🖊 🎮 🖏 🛛 New
	🔪 🚺 Times New Roman 🔹 🖉 🖌 🖉	Open
Erase Disc		iii 고 27 iii 월 수 Save As
Disc Info	-00.00 -00.00 -0.00	60.08 100.08 Preview
ず Greate Covers and Labels		Disc Data
		Label templates:
		Deta Title Diner radius: 31.40 mm Outer radius: 36.50 mm Width: 5.10 mm
	Use label from compilation	✓ Adganced
		🙆 Dack Ment 🧉

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 → 46
- Final Screen $\rightarrow 66$

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.

😿 Nero Espress		
Advanced	•	LightScribe Print Properties Print a LightScribe label on selected recorder.
 Save Audio Tracks Save Data Track Frase Disc Disc Info 		Prink contrast © Draft © Normal @ Best
😴 Greate Covers and Labels	,	Namber of copies: 1 Drives Fit HL-DT-ST ED-RE_GGW-H20L
		Status: Ready Progress:
		Autometically shut down the PC when done
		Proview G Dock S Bink

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 availa- ble.	



LightScribe

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.
- 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.
 - \rightarrow The log is saved.
- **13.** To print the log, click the **Print** button.
 - \rightarrow 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 → 46
- Final Screen \rightarrow 66



10 Labelflash

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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.

This function is only available in the full version of Nero Express that is included in Nero Multimedia Suite.

You can always upgrade your Essentials version or your version of Nero Back-ItUp & Burn at <u>www.nero.com</u> to get all the functions.

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.

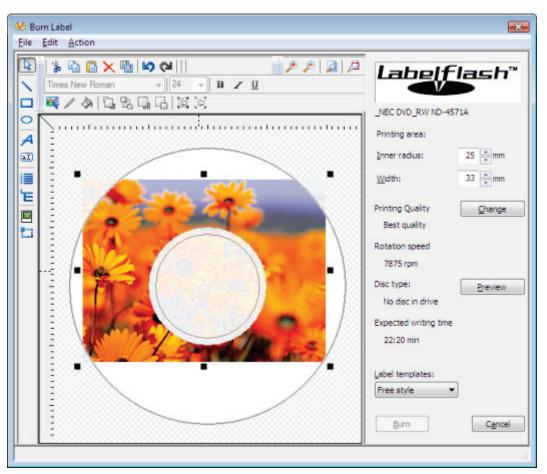
This feature is only available in recorders that support Labelflash technology.

10.1 Burn Label Screen

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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.





Burn Label Window

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.
Selection list Label templates	Contains a selection of different templates for designing the label. You can continue to edit and customize a selected template.

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Labelflash

Button Writing	Starts the burn process.
Button Cancel	Cancels the procedure and closes the window.

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 Labelflash label 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.
 - \rightarrow The **Burn Label** window is opened with the Labelflash logo.
- 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.
 - \rightarrow 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.
 - \rightarrow 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.
 - \rightarrow The Labelflash Print Properties window is closed and the changes are accepted.

₩ LabelFlash(TM) Print Properties	
Print Device Information	
_NEC DVD_RW ND-4571A	Print quality profile
Firmware Version: 1-01	Best quality
Select the default side that you would like to print your label on:	Contrast level (1-100)
Data side (DiscT@2(TM))	Rotation speed
Label side (LabelFlash(TM))	7875rpm 👻
Both sides	
Print Preview	Labelflash™ ■
Eject disc after printing has finished	
	OK Cancel

Labelflash Print Properties

- 6. 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.
- 7. Click the OK button.
 - \rightarrow 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.

Burn functions are limited in Nero Express Essentials and in Nero Express that is included in Nero BackItUp & Burn.

You can always upgrade at <u>www.nero.com</u> 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.

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





Burn Compilation

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.
- Add to the desired settings in the extended area.
- 6. Click the **Burn** button.
 - \rightarrow 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

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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.

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Advanced	•	Burning Process Please wat	
		Time Event 9:35:03 PM Burn process started	
		. 0	Ш.Э
		Process status:	Total time: 0:00:04
		0	Stob

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.

😴 Nero Express		- 6
Nero Express	Final Burn Settings Click 'Burn' to start the record	drg process.
Burn Settings Witing speed: Maximum Witin Amount of the set of the	Curregt recorden Disg name: TBig (CD TERT): Artist (CD TERT): Garguage: Nugber of copies:	Image: Strike and discrete strike and the strike a
	0	🕒 Esck 💦 Dym

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>Book Type</u> 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.



Burn Compilation

Check box Verify data on disc after burning	Compares the burned data to the original data. With compilations of <u>multisession</u> 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 **d** button in the left margin of the window.



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

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 dis- played. 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 re- duces 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. Current recorders mostly have such a

The following setting options are available:



Burn Compilation

	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 decom- pressing data before burning, e.g. when burning an <u>Audio CD</u> from MP3 files. You can assume that if simulation is success- ful, 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 simula- tion). 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. 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 \rightarrow 24).</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 <u>disc-at-once</u> method. This entry is selected by default.



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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).



Copying a Disc

12.2 Copying a Disc

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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.

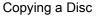
To copy a disc, proceed as follows:

- **1.** Click the **Image**, **Project**, **Copy** menu icon in the Nero Express start screen.
 - \rightarrow The corresponding copy options are displayed.
- 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.

😿 Nero Express		
Advanced	Select source and destination Please select source and destination	drives and insert source disc.
	Source drive: Destination drive:	E: HL-DT-ST DVDRAM GHDONS15 Options Options Caution: Some discs cannot be copied. They may be copy protected or contain errors. To check if your disc can be copied, please conduct a test by burning a copy in simulation mode (to do so, expand the tab to the left and select "Simulation").
	Quick copy Writing speed: Nugber of copies: Image file:	Select this option to copy directly from the source to the destination drive. No space will be used on your hard drive. Maximum
	0	G took

- Source and Destination
- 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 \rightarrow 66

Copying a Disc

12.3 Copy Settings

Nero Express		
Advanced	Select source and destination Please select source and destination	
	Source drive: Destination drive:	E: HL-DT-ST DVDRAM GH20NS15 E: HL-DT-ST ED-RE_GGW-H20L [DAD] Caution: Some discs cannot be copied. They may be copy protected or contain errors. To check if your disc can be copied, please conduct a test by burning a copy in simulation
	Quick.copy	mode (to do so, expand the tab to the left and select 'Smulation'). Select this option to copy directly from the source to the destination drive. No space will be used on your hard drive.
	Writing speed: Nuggber of copies:	Maximum • I • I verify data on dec after burning
	Image file:	C:\Jsens\Administrator\Documents\TempImage.nn

Source and Destination screen

Selection list	Defines the drive from which the source information is read.
Source drive	Insert the CD or DVD that you want to copy into the drive.
Selection list	Creates the destination drive.
Destination drive	Insert a blank disc into this drive.
Button	Opens the Recorder Information window.
Info	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 disc is burned. Only the burn speeds that are supported by the selected recorder are dis- played. Not available for Nero Image Recorder.

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



Copying a Disc

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.

Erase Rewritable Disc Window

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.

ኛ Erase Rewritable Disc 🛛 😨 💌
Select recorder:
🚔 D: HL-DT-ST DVD-RAM GSA-H22L
□ <u>U</u> se multiple recorders
Select the erase method to be used:
Quick-erase rewritable disc
The disc will appear to be empty but data is not physically erased. Use this option with caution if the disc contains confidential data.
Erase speed:
Maximum
<u>E</u> rase <u>C</u> ancel

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 me- thod 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 con- tents. 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 contents. 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.	



Final Screen

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 program.

The following setting options are available

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

About Nero SecurDisc Viewer

15 About Nero SecurDisc Viewer

Nero SecurDisc Viewer is a standalone application that is part of the SecurDisc technology platform. SecurDisc is a technology developed by Nero and HLDS to create discs with special protection properties. No special hardware is needed.

Nero SecurDisc Viewer is available as a free download at <u>www.securdisc.net</u> or <u>www.nero.com</u> and is also included automatically in a SecurDisc disc that is burned with Nero Burning ROM or Nero Express.

Discs that are created with Nero and the SecurDisc compilation type include data integrity and reconstruction. Additionally the data on the SecurDisc disc can be protected against unauthorized access by using a password. The data can also be digitally signed. Nero SecurDisc Viewer allows you to copy the protected data to your hard drive and to check the security of the data.

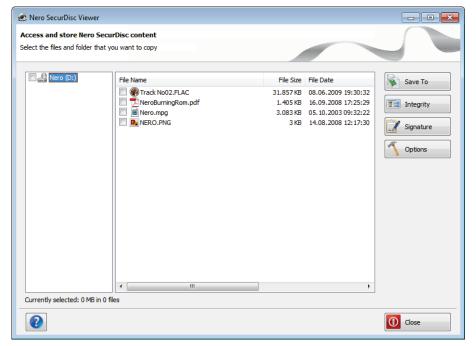


More information on SecurDisc technology can be found at <u>www.securdisc.net</u>.

15.1 Starting Nero SecurDisc Viewer

Nero SecurDisc Viewer is included automatically in a SecurDisc disc that is burned with Nero Burning ROM or Nero Express. Insert the SecurDisc disc in a drive to open Nero SecurDisc Viewer automatically.

Nero SecurDisc Viewer can also be opened by double-clicking the **NeroSecurDiscView**er.exe file. This file can either be found on the SecurDisc disc or it can be downloaded from <u>www.securdisc.net</u> or <u>www.nero.com</u>.



Main screen





About Nero SecurDisc Viewer

15.2 Copying data to hard drive

With Nero SecurDisc Viewer you can copy the files from the SecurDisc disc to your hard drive. If the files have been protected against unauthorized access, you can insert the password here.

Proceed as follows:

- **1.** Select the check boxes of the files you want to copy to the hard drive.
- 2. Click the Save to button.
 - → If data on the SecurDisc disc is password-protected, the Password Protection window is opened.



- **3.** Enter the password in the text box and click the **Apply** button.
 - \rightarrow An explorer window is opened.
- **4.** Select the required folder and click the **OK** button.
 - → The Copy Data window is opened and the files are copied. You can follow the progress with the status bar and the displayed messages. As soon as the copy process is finished, a message is displayed to notify you.
 - \rightarrow The selected files are copied to the selected folder.

15.3 Checking data integrity

Nero SecurDisc Viewer can be used to check the data integrity of a SecurDisc disc by using the checksum feature. The data integrity check warns you if the data on a disc is at risk of disc decay so that you have time to back it up to another disc.

Proceed as follows:

- **1**. Click the **Integrity** button.
 - → The File Integrity Check window is opened and the integrity check is carried out. You can follow the progess with the status bar and the displayed messages.
 - As soon as the integrity check is finished, a message is displayed to notify you about the result of the check.





About Nero	SecurDisc	Viewer
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Data Integrity Checking for Drive: D		
Time	Event	Result
3 01.06.2010 11:20:21	Finished	Successful
Current file: Total progress:		
		Close

15.4 Checking signature

With Nero SecurDisc Viewer you can verify the authenticity of the SecurDisc disc if it is digitally signed. You need the public key from the distributer of the SecurDisc disc for this purpose. By checking the public key, Nero SecurDisc Viewer is able to confirm that the data is authentic and has not been manipulated.

Proceed as follows:

- **1.** Click the **Signature** button.
 - \rightarrow An explorer window is opened.
- 2. Select the public key (*.bpk) which the SecurDisc disc is signed with.



Public key

The creator of the SecurDisc disc has also created or selected the public key for the disc. The key is to be distributed by the creator of the disc, too.

- 3. Click the **OK** button.
 - \rightarrow The explorer window is closed and the **Check** window is opened.
 - ightarrow The signature is checked. You can follow the progess with the status bar and the displayed messages.
 - → As soon as the copy process is finished, a message is displayed to notify you about the result of the check.



About Nero SecurDisc Viewer

Digital Signature Verification of Drive: D			
	Time	Event	Result
•	01.06.2010 11:20:43 01.06.2010 11:20:57	Digital signature verification for drive: (D) started Finished	Done Successful
	Current file: Total progress:		
			Close





16 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 <u>www.nero.com</u> 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.
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Configuration Options

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.

16.1 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.



Configuration Options

16.2 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 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.

16.3 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.



Configuration Options

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 in- stalled 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 Nero burn functions in the con- text menu	Allows Nero Express to be started from the shell context 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).

16.4 Ultrabuffer Settings

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

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

Configuration Options

16.5 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.
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.

Technical Information

17 Technical Information

17.1 System Requirements

Nero Express is part of the Nero product you have installed. Its system requirements are the same. Detailed system requirements of this and all other Nero products can be found in the Support section on our Web site <u>www.nero.com</u>.

17.2 Formats Supported

17.2.1 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.

17.2.2 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

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Compiling AVCHD video and BDMV-Video is only available in Nero Express that is included in Nero Multimedia Suite.





Technical Information

17.2.3 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 (MP4, M4A)
- 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.

The plug-in can be added to Nero Multimedia Suite. You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

Ripping audio tracks is only available in Nero Express that is included in Nero Multimedia Suite.

17.2.4 Video Formats and Codecs

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



Compiling AVCHD video and BDMV-Video is only available in Nero Express that is included in Nero Multimedia Suite.



Technical Information

17.2.5 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)

17.2.6 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)



18 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 AAC

Various MPEG-4 video and audio codecs are collated in Nero AAC 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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