



Nero Linux Manual

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**Nero AG**



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# 1 General information

## 1.1 About the manual

This manual is intended for all users who want to learn how to use Nero Linux. It is therefore structured according to operations and provides step-by-step instructions for what you want to do.

In order to make best use of this manual, please note the following conventions:

Symbol	Meaning
	Indicates warnings, preconditions or instructions that have to be followed strictly.
	Indicates additional information or advice.
1. Start ...	A number at the beginning of a line indicates a request for action. Carry out these actions in the order specified.
	Indicates an intermediate result.
	Indicates a result.
<b>OK</b>	Indicates text passages or buttons that appear in the program interface. They are shown in bold print.
<u>Chapter</u>	Indicates references to other chapters. They are executed as links and are shown in red and underlined.
[...]	Indicates keyboard shortcuts for entering commands.

## 1.2 About Nero Linux

Nero Linux is a high-performance software application with a user-friendly interface for burning data, music and videos on CD,DVD, HD DVD and Blu-ray discs.

Nero Linux enables advanced users to customize their work. You will have full control of your burning project. For example, you can define the file system used or assign a name for the disc.

Despite the scope and the vast ability of Nero Linux, it remains an easy-to-use burning program which creates your own discs in just three easy steps. First select the desired disc type and the disc format (depending on the installed recorder and your requirements), compile the files for burning and then start the burn process. It is just as quick and easy to copy discs (not copy-protected discs).

## 2 System requirements

### 2.1 General system requirements

- To install Nero Linux you need administrator rights

#### Processor and Installed Memory

- For writing audio and data discs: 800 MHz Intel® Pentium® III processor, AMD™ Sempron™ 2200+ or equivalent, at least 128 MB RAM or more

#### Hard Drive Space

- 700 MB free hard drive space for CD images and temporary files
- Up to 9 GB free hard drive space for DVD images and temporary files
- Up to 50 GB free hard drive space for Blu-ray Disc BD-R/RE dual layer disc images
- Up to 30 GB free hard drive space for HD DVD-R/RW dual layer disc images

#### Optical device

- CD and/or DVD/DVD-RAM recorder

#### Sound Devices and Speakers

- 16-bit sound card and speakers

#### Optional

- Blu-ray recorder and Blu-ray disc
- HD DVD recorder and HD DVD

### 2.2 Linux kernel requirements

- Kernel version 2.4 or higher
- Together with Serial ATA recorders, we recommend kernel version 2.6 or higher

#### 2.2.1 How to get the Linux kernel version

To get the version of the Linux kernel, proceed as follows:

1. Open a terminal.
  2. Type the command `uname -r`
- ➔ The output gives you the number of the kernel version, for example 2.6.13.2.

#### 2.2.2 About the Linux kernel version

The kernel is the heart of your Linux system. It provides, for example, the low-level drivers used to access your devices.

In order to identify your devices file names clearly, you need to first know the version of the Linux kernel you are currently using.

The version depends on four numbers *A.B.C.D* separated by periods (full stops), for example 2.6.13.2.

The first number (A)	represents the kernel version (2 in our example). It is changed least frequently, and only when major changes in the code and the concept of the kernel occur.
The second number (B)	represents the kernel major revision (6 in our example). Prior to kernel 2.6, all kernels that are considered “stable” have an even major number. The kernels with odd major numbers are development kernels.
The third number (C)	represents the kernel minor revision (13 in our example). This number is incremented when new drivers or new features are added.
The last number (D)	represents the kernel release number (2 in our example). This number is incremented when a bug fix or a security patch is applied to the kernel.



The Linux kernel version is often identified by the first two numbers, as there is no significant change between two releases of the same kernel.

Prior to kernel 2.6.11, there were only three numbers. With such a versioning scheme, the third number was incremented when new features were added or security fixes applied.

## 2.3 Advanced system requirements

Under Linux, all the devices are associated with specific files called device files. All device files that are available on your machine are located inside the `/dev` directory. Depending on the version of the Linux kernel you are using, your recorder device file name may differ, due to the low-level driver it is using.

In this chapter you will find explanations on how to find your device file names and how to set access on them. In any case, if Nero Linux detects that something is misconfigured on your system, it will warn you when starting.

### 2.3.1 Explanation to device filenames under Linux

Currently, you can have many different interfaces on a recorder: IDE, SCSI, USB, FireWire (IEEE 1394) or Serial ATA.

#### 2.3.1.1 IDE devices

Most internal recorders are connected to the IDE bus. Linux assigns them a device file according to their position on this bus (bus number and master/slave settings). Basically, you should have the following naming convention:

- `/dev/hda` : Primary Master device
- `/dev/hdb` : Primary Slave device
- `/dev/hdc` : Secondary Master device
- `/dev/hdd` : Secondary Slave device



If you have an additional IDE controller on your motherboard, the filenames scheme is the same, using the remaining letters (for example `/dev/hde` and `/dev/hdf`).



### 2.3.1.2 SCSI devices

SCSI recording devices are handled by two different drivers under Linux, and so two different device files are created to handle one physical device:

- `/dev/srX` or `/dev/scdX` : Used only to read data from media
- `/dev/sgX` : Used by Nero Linux to communicate with the device

(X is a number identifying your device)

If your recorder is correctly recognized by the Linux kernel it should appear in the file `/proc/scsi/scsi`. Unfortunately, there is no way to determine the X number from the SCSI coordinates of your recorder. But usually, the numbers are used incrementally, starting from 0, corresponding to the position of the device in the `/proc/scsi/scsi` file.

Usually all distributions are shipping a kernel configured with these options. Sometimes, depending on your kernel configuration, one of these files can be unavailable. In order to have both, you should make sure that your kernel is configured with the following options:

- CONFIG\_SCSI (SCSI support)
- CONFIG\_BLK\_DEV\_SR (SCSI CD-ROM support : provides `/dev/scdX`)
- CONFIG\_CHR\_DEV\_SG (SCSI generic support : provides `/dev/sgX`)

For more information about how to configure your kernel for recording CD or DVD, you can refer to the generic Linux HOWTOs, for example see

- CD-Writing HOWTO: [http://www.ibiblio.org/pub/Linux/docs/HOWTO/other-formats/html\\_single/CD-Writing-HOWTO.html](http://www.ibiblio.org/pub/Linux/docs/HOWTO/other-formats/html_single/CD-Writing-HOWTO.html)
- CDROM-Writing HOWTO: [http://www.ibiblio.org/pub/Linux/docs/HOWTO/other-formats/html\\_single/CDROM-HOWTO.html](http://www.ibiblio.org/pub/Linux/docs/HOWTO/other-formats/html_single/CDROM-HOWTO.html)

### 2.3.1.3 External devices

As all external devices are associated with a virtual SCSI device, the filename scheme is the same as for real SCSI devices (see [SCSI devices](#)).

If you do not see your external device in the `/proc/scsi/scsi` file after you plugged it in, make sure that the kernel is correctly configured. For more information please refer to your Linux distribution documentation.



If your external device is inside the `/proc/scsi/scsi` file and not present in the recorders list of Nero Linux, make sure you have the SCSI generic support enabled. Most of the time, loading the 'sg' kernel module fix this problem.

### 2.3.1.4 Serial ATA devices

Some new recorders are now coming with a Serial ATA connector instead of the old IDE one. These devices are correctly handled with the 2.6 kernel **libata**. However we strongly recommend to use a kernel 2.6.19 or higher to use such devices without problems.

Serial ATA devices controlled by the libata are – like external devices – associated with a virtual SCSI device, so they should also appear in the `/proc/scsi/scsi` file.

### 2.3.2 IDE Devices configuration with 2.4 kernels

With 2.4 kernels, all IDE devices that you want to be available in Nero Linux must use the **ide-scsi** driver (even CD/DVD readers). This driver associates a virtual SCSI device with a standard IDE device.

Usually, Linux distributions automatically configure everything so that only recorders use this driver. In such cases, you will not be able to use your CD or DVD readers inside Nero Linux and you have to make the device use the **ide-scsi** driver.

Before you configure a device, make sure that you have configured your kernel with the following options:

- CONFIG\_BLK\_DEV\_IDESCSI (SCSI emulation support)
- CONFIG\_SCSI (SCSI support)
- CONFIG\_BLK\_DEV\_SG (SCSI generic support)

Configuring a device, so that it will use the **ide-scsi** driver, is done by providing a specific argument **hdx=ide-scsi** to the kernel command line. For example, if the device file corresponding to your recorder is **/dev/hdb**, you will have to provide **hdb=ide-scsi** to the kernel command line.

If you do not know how to do this, please refer to your distribution documentation to find out how to pass options to the kernel at boot time. Please also note that most of the actual distributions provide some graphical frontends to modify the boot loader parameters:

- For **Red Hat Linux** run **ksconfig** (this application is called **Kickstart Configurator**). When the application is running, click on **Boot Loader Options** and fill the **Kernel Parameters** field.
- For **SuSE Linux** run **yast2**, select **System** in the left pane and then double-click on **Boot Loader Configuration**. Once the module is launched, click on **Edit Configuration Files** to set up the device parameters.

### 2.3.3 IDE Devices configuration with 2.6 kernels

With 2.6 kernels, the native IDE CD-ROM driver, called **ide-cdrom**, has been completely rewritten to use the latest technologies available and permit optical disc recording. This driver includes DMA acceleration that lets you use high-speed devices (like DVD recorders).

Accordingly, the **ide-scsi** driver (that has been used with lower version kernels) has been deprecated. If you continue using this driver with a 2.6 kernel, your devices will not be available with Nero Linux (note that you will also have a warning message from the kernel at boot time).

In order to use an IDE device with Nero Linux under a 2.6 kernel, you must associate it with the **ide-cdrom** driver. Therefore, the kernel command line must not be associated with the "old", **ide-scsi** driver (no **hdx=ide-scsi** parameter).

If you do not know how to do this, please refer to your boot loader documentation.

## 2.3.4 Setting correct permissions on the devices files

### 2.3.4.1 Static /dev support

If you need to allow user accounts to have access to all your disc devices you can do this in Linux by setting correct permission on the corresponding device file names. This section shows how to correctly configure the permission on the devices file names for all users of the system.

Requirements:

- You have enough privileges to do so.

To setup correct permissions on your device files, proceed as follows:

1. Open a terminal.
2. Type the following command:

- `chmod o+r+w /dev/sg*`

- `chmod o+r+w /dev/hdX`

(where **x** is the letter corresponding to the IDE device)



You can run the last command more that once if you have multiple IDE devices.

- ➔ Users are given read and write permission on all your SCSI generic devices (CD-ROM for example) and your IDE disc devices.



If you only want to give access to some users, another possibility is to create a new group called for example "nero" and change the group of the device files corresponding to your disc devices with it. Then give read/write permission to the group on these device files and finally, just add all the users that are allowed to use Nero Linux to the newly created group.

### 2.3.4.2 udev support

Nero Linux supports **udev**, the new **/dev** file system implementation that are used in actual Linux distributions.

With this file system, all permissions is set during boot time using some specific configuration files. In order to make your modifications permanent, you have to change the files located in **/etc/udev/rules.d**. For more details, you can have a look to udev FAQ.



In some rare cases, an hotplug device that gets plugged in when Nero Linux is already started might not being recognized directly. In such cases, restart the application.

## 2.3.5 Setting up DMA acceleration on IDE devices

DMA acceleration provides an improvement in throughput for the disc drives, and let you safely use all your recording devices. Depending on your Linux kernel and distribution configuration, you might have DMA acceleration that is automatically enabled on startup.

If your hardware supports it, we recommend enabling DMA acceleration not only for IDE hard disk drives, but also for disc drives such as CD/DVD readers and recorders.



If one of your devices has no DMA acceleration, Nero Linux will warn you when starting the application.

To enable DMA acceleration on one of your devices, you can run the following command (as root):

```
■ hdparm -d1 /dev/hdX
```

(where **x** is the letter corresponding to the IDE device)

This setting is not permanent. If you want to enable DMA at boot time, you can add the command above in one of your startup scripts. As these scripts are distribution dependant, please refer to your distribution documentation to find out how to do this. Please note that most of the distributions have some graphical frontends to configure this.

For example: With SuSE Linux distributions, you can use **YaST2** to setup the DMA-mode of your IDE devices. To do this, launch **YaST2** and select the hardware item in the left pane and then double-click on **IDE-DMA Mode**. Once the module is launched, make sure that all your disc drives DMA mode is set to **On**.

### 3 Supported formats

Nero Linux supports the following disc types:

- CD
- DVD
- HD DVD
- Blu-ray Disc



The recorder installed determines which disc type (**CD**, **DVD**, **HD DVD** and/or **Blu-ray Disc**) can be burned.

With Nero Image Recorder which is included in Nero Linux you will still be able to create an image (see [Creating an image file](#)) even if you have not installed a recorder. Nero Image Recorder is also suitable for creating an image of a disc type not supported by the installed recorder (see [Expert Features](#)). You can therefore create a HD DVD image for instance without having installed a HD DVD recorder.

You can use Nero Linux to burn the following formats:

Disc formats	Audio formats
<ul style="list-style-type: none"> <li>■ Data disc: CD/DVD-ROM (ISO) CD/DVD/HD DVD-ROM/Blu-ray disc (UDF) CD/DVD-ROM (UDF/ISO)</li> <li>■ Audio CD</li> <li>■ Mixed Mode CD</li> <li>■ CD EXTRA</li> <li>■ miniDVD</li> <li>■ DVD-Video</li> <li>■ Bootable disc (CD/DVD-ROM (Boot))</li> </ul>	<ul style="list-style-type: none"> <li>■ FLAC</li> <li>■ MP3</li> <li>■ OGG/Vorbis</li> <li>■ PCM</li> <li>■ WAV</li> </ul>

## 4 Installing Nero Linux



To install Nero Linux you need administrator rights on your computer.

Nero Linux is packaged in the RPM and Debian format. These formats are used by the majority of Linux distributions.

To install the program, proceed as follows:

1. Open a terminal.
2. Go to where your package is located.
3. Type the following command:

- `rpm -i nerolinux-<version>-<machine>.rpm` (RPM package)
- `dpkg -i nerolinux-<version>-<machine>.deb` (Debian package)



You can also use your distribution's software installer tool to install Nero Linux.

- ➔ Some shortcuts will be added in the KDE and GNOME programs menu. With the Debian package, it will also add a shortcut to Nero Linux in the Debian menu subsystem repository.



If you do not get a shortcut, you can copy the generic one that is located in `/usr/share/applications/nerolinux.desktop`.

## 5 Working with Nero Linux

### 5.1 Main screen

The main screen in Nero Linux is the starting point for all actions. It consists of a menu bar and a toolbar with buttons and a drop-down list.

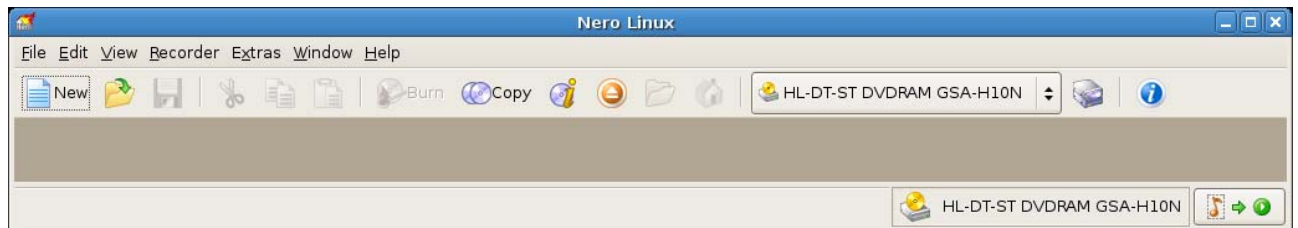
















Fig. 1: Nero Linux menu bar and toolbar

The main screen contains the following options:

Menu Bar	
<b>File</b>	Opens the <b>File</b> menu containing file functions such as opening, saving and closing that you are already familiar with. You can also show the configuration options for the compilation, update the compilation and define configuration options (see <a href="#">Configuration</a> ).
<b>Edit</b>	Opens the <b>Edit</b> menu which contains the file editing functions in the selection screen such as cutting, copying and deleting that you are already familiar with. You can also display the properties of a selected file.
<b>View</b>	Opens the <b>View</b> menu where you can customize the Browser Area. You can also change visualization options here.
<b>Recorder</b>	Opens the <b>Recorder</b> menu which contains functions for the recorder. You can select the recorder here, start the burn process and erase a rewritable disc. You can also display information on the disc and eject it.
<b>Extras</b>	Opens the <b>Extras</b> menu which let you convert audio files into a different format, save audio files from an Audio CD, and view the content of data tracks as hexadecimal data.
<b>Window</b>	Opens the <b>Window</b> menu which enables you to alter the position of the Compilation Area and Browser Area.
<b>Help</b>	Opens the <b>Help</b> menu which contains the help options you are familiar with. You can also enter a new serial number if necessary.
Toolbar	
	Opens the <b>New Compilation</b> window where you can set options for a burn or copy process.
	Opens an existing compilation.
	Saves the active compilation.
	Cuts selected elements in the compilation (selection).
	Copies selected elements in the compilation (selection).
	Pastes a selection that was cut or copied beforehand.

	Starts the burn process by opening the <b>Burn Compilation</b> window containing the <b>Burn</b> tab.
	Starts the copy process by opening the <b>New Compilation</b> window containing the <b>Burn</b> tab.
	Displays information on the disc inserted such as the contents (if any) and capacity for instance.
	Opens the selected recorder.
	Shows or hides the file browser.
	Display the user's home folder contents in the file browser
Drop-down menu	Displays available recorders.
	Opens the <b>Choose recorder</b> window by selecting from a list a recorder available for the burn process.
	Displays information on program and version number.

## 5.2 Basic steps

The main task of Nero Linux is to select files and folders and to burn them to a disc. This is done in three basic steps:

- In the **New Compilation** window select a disc type and the disc format and set the options in the tabs (see [New compilation](#)).
- In the selection screen select files that you want to burn (see [Selecting a file](#)).
- Start the burn process (see [Burning a compilation](#)).



## 6 New compilation

### 6.1 New Compilation window

In the **New Compilation** window select the disc type and configure the options for the disc format in the tabs. The window basically looks the same for all disc types. The only difference is the tabs that are available.

When you launch Nero Linux, the **New Compilation** window opens automatically. If the window is not open, click on the **New** button. In the default setting, **CD-ROM (ISO)** is selected and the **ISO** tab is on top.

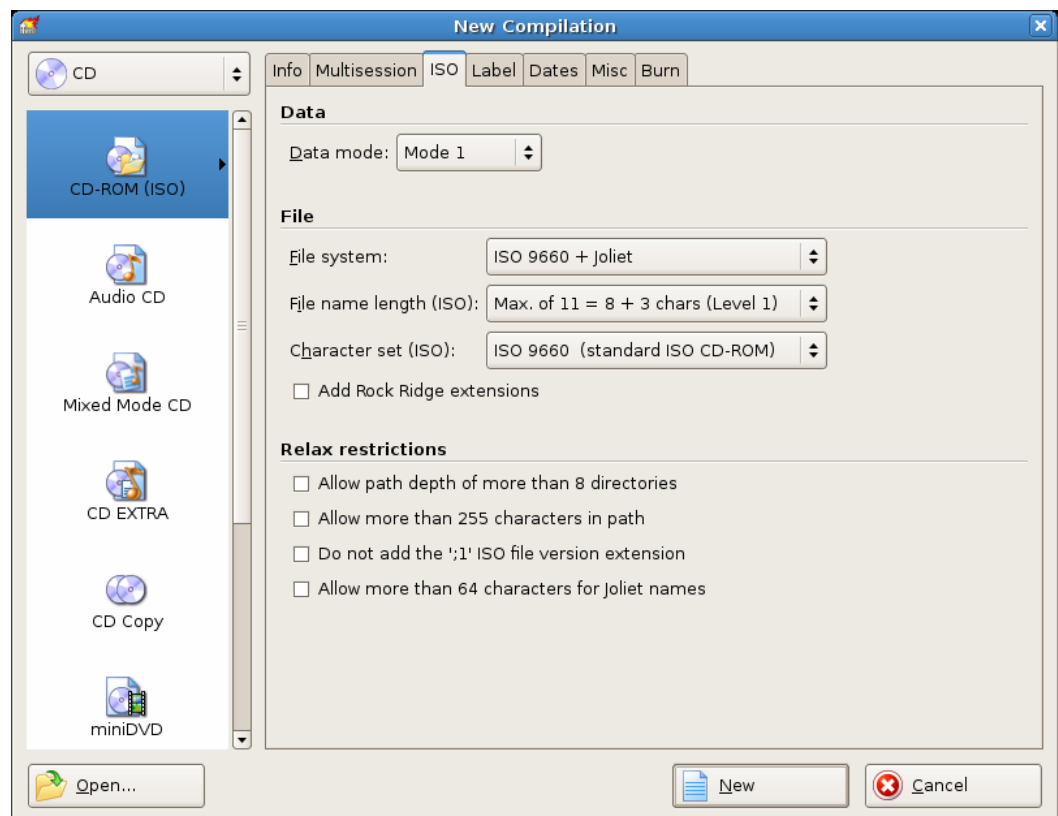


Fig. 2: **New Compilation** window, CD-ROM (ISO) disc type

The window consists of a drop-down menu, a selection list, various tabs and four buttons.

The drop-down menu can contain the entries **CD**, **DVD**, **HD DVD** and **Blu-ray Disc**. The selection list will contain different entries depending on the entry selected.



The recorder installed will determine which disc type (**CD**, **DVD**, **HD DVD** and/or **Blu-ray Disc**) is displayed and burned. If the recorder can only burn CDs, the drop-down list is grayed out.

Using Nero Image Recorder which is installed in Nero Linux you will always be able to create an image (see [Creating an image file](#)) even if you have not installed a recorder. Nero Image Recorder is also suitable for creating an image from a disc type that the installed recorder does not support (see [Expert Features](#)). You can therefore create a HD DVD image for instance without having installed a HD DVD recorder.

The following entries are available in the selection list:

Entry	Description
<b>CD/DVD-ROM (ISO)</b>	Creates a data CD/DVD, each file type can be burned. The burned data complies with the ISO standard.
<b>Audio CD</b>	Creates a standard Audio CD that can play audio files on all Audio CD players.
<b>Mixed Mode CD</b>	Creates a CD with data and audio files in a single session. Usually a data file is followed by one or more audio files for instance (e.g. sound track in PC games). Older Audio CD players are often not capable of recognizing the data file as such and attempt to play it.
<b>CD EXTRA</b>	Creates a multisession CD with audio and data files that are stored in two sessions. The first session contains the audio files and the second session the data. Popular CD players play the first session as Audio CDs. The second session can only be used by PCs with a CD-ROM drive, it cannot be 'seen' by a normal CD player.
<b>Copy CD/DVD/HD DVD/Blu-ray Disc</b>	Copies a source disc to a CD/DVD/HD DVD/Blu-ray disc (see <a href="#">Copying discs</a> ).
<b>miniDVD</b>	Creates a CD that uses the specifications of a DVD. The miniDVD has the same technical options and qualities as a DVD. It can easily be played on a PC whereas there is no guarantee that it can be played in all DVD players. You can use Nero Linux to burn a miniDVD if the DVD video title, i.e. a complete DVD folder structure is already available. However, if you want to convert video files into a DVD video title, you cannot do so with Nero Linux.
<b>CD/DVD-ROM (Boot)</b>	Creates a bootable CD (see <a href="#">Bootable disc</a> ).
<b>CD/DVD-ROM/HD DVD/Blu-ray Disc (UDF)</b>	Creates a data disc, all file types can be burned. The burned data complies with the UDF standard.
<b>CD/DVD-ROM (UDF/ISO)</b>	Creates a data disc; all file types can be burned. The burned data complies with ISO and UDF standards.
<b>DVD-Video</b>	Creates a DVD that can play high-quality video and/or picture files on DVD players. You can use Nero Linux to burn a DVD if the DVD video title, i.e. a complete DVD folder structure is already available. However, if you want to convert video files into a DVD video title, you cannot do so with Nero Linux.

The following buttons are available:

Button	Meaning
<b>Open</b>	Opens a file browser where you can find and open a saved compilation.
<b>New</b>	Opens the selection screen where you can select the files for burning.
<b>Cancel</b>	Closes the <b>New Compilation</b> window.

You can set the options for the respective disc format in the tabs on the **Compilation** window. Refer to the matrix in the appendix for information on which tab is available for which disc type (see [Copying discs](#)). The following tabs are available:

Tab	Description
<b>Info</b>	Shows statistical information on the compilation.
<b>Multisession</b>	Contains options for configuring multisession discs (see <a href="#">Multisession tab</a> ). The tab is only available if a recorder is installed.
<b>ISO</b>	Contains options for configuring the ISO file system (see <a href="#">ISO tab</a> ).
<b>UDF</b>	Contains options for configuring the UDF file system (see <a href="#">UDF tab</a> ).
<b>Label</b>	Defines the title of the CD.
<b>Date</b>	Allows you to define the date of the compilation and of the associated files. You can also specify a validity period for the disc. (You can access the data regardless of the validity period specified)
<b>Misc</b>	Defines whether and which files are stored in the buffer memory.
<b>Audio CD</b>	Contains options for configuring audio files. You can also enter additional information about the CD (see <a href="#">Audio CD tab</a> ).
<b>Boot</b>	Contains options for configuring a bootable disc (see <a href="#">Bootable disc</a> and <a href="#">Boot tab</a> ).
<b>Burn</b>	Contains options for configuring burning (see <a href="#">The Burn tab</a> ).

### 6.1.1 Multisession tab

The **Multisession** tab provides the option to create multisession discs for data discs. Multisession discs can be burned in multiple sessions until you have reached the maximum disc capacity. A session is a self-contained data area that is burned using a single process, and consists of a lead-in (with the table of contents), and one or more tracks and a lead-out. Discs without the multisession option, e.g. Audio CDs, are burned in a single session.



Multisession discs are particularly suitable for backing up important files burned on a regular basis.

If a new multisession disc is being started, Nero Linux also saves (if possible) the point of origin for the files. This information is used when continuing the multisession disc.

If a multisession disc is being continued, Nero Linux automatically sets a cross reference to the imported session, i.e. the table of contents for the imported session is copied to the table of contents for the current session. You must define which session is being imported at the start of the burn process. The files in the previous sessions are retained and continue to take up space.

In the case of unchanged files, a cross reference is set to the file of the same name in the previous session. In this case Nero Linux automatically verifies whether the correct multisession disc has been inserted for continuation. If not, the disc is ejected.



If you disable the **Finalize disc** check box on the **Burn** tab, you can always burn additional sessions on the disc, but then only the last session will be visible and you will only be able to access data from the final session.

The **Multisession** tab contains the following check boxes in the **Multisession** area:

<b>Start Multisession disc</b>	Burns the selected compilation in one session to the disc. If the disc already contains sessions, you can also select this option. Sessions are then not imported and cross references are not set.
<b>Continue Multisession disc</b>	Continues a multisession disc by burning an additional session to a disc with at least one session. Cross references to imported sessions are set in the process.
<b>No Multisession</b>	Creates a disc without a multisession.

## 6.1.2 ISO tab

The **ISO** tab provides options for configuring the ISO file system.

ISO 9660 is a system-independent standard. It can be read on all operating systems. The following features apply:

- Permits eight characters (Level 1) and/or 31 characters (Level 2) for the file name.
- Permits eight characters for the folder name.
- Restricts the maximum directory depth to eight levels (including root folder).
- The characters A-Z, 0-9 and the underscore (\_) are allowed.

Joliet is a standard that has been designed for Microsoft® Windows® 95 and Microsoft® Windows® NT. Up to 64 characters are supported in the file name (8 characters in DOS). The characters A-Z, a-z as well as foreign language characters such as the German umlaut may be used.

The following configuration options are available in the **Data** and **File** area:

<b>Data mode</b>	Selects the mode for the data. <b>Mode 1</b> and <b>Mode 2/XA</b> are available. The latest drives can easily read Mode 1 and Mode 2. Some older drives however cannot read Mode-1 discs correctly. If the disc is always to be readable on older drives, you should select the Mode-2/XA format.
<b>File system</b>	Selects the file system that is used for the data. <b>ISO 9660 only</b> and <b>ISO 9660 + Joliet</b> are available. <b>ISO 9660 only:</b> pure ISO format is used. <b>ISO 9660 + Joliet:</b> the ISO format is used and is enhanced by the Joliet standard.
<b>File name length</b>	Defines the possible length of the file name. <b>Level 1</b> and <b>Level 2</b> are available. In Level 1 the file name can be eight characters long and the file name extension (e.g. *.doc) three characters. In Level 2 the file name can be 31 characters long.
<b>Character set</b>	Defines the character set that is used.
<b>Add Rock Ridge extension</b>	Adds a Rock Ridge extension on Unix systems to add POSIX rights to the items.

In the **Relax restrictions** area, restrictions imposed on the selected file system are relaxed. For example, you can allow a higher path level or more than 64 characters for the Joliet name.



If it should be possible to read the disc on all operating systems, select **ISO 9660** as the file system and disable all check boxes in the **Relax restrictions** area.



If the disc is to be used mainly on Windows® computers and you want to use lowercase letters and foreign language characters such as the German umlaut in the file names, select **ISO 9660 + Joliet** as the file system.

### 6.1.3 UDF tab

The **UDF** tab provides options for configuring the UDF file system. The UDF standard was developed by OSTA (Optical Storage Technology Association) in response to the requirements of DVDs. The standard works on all platforms.

The following entries are available in the **Options** drop-down menu:

<b>Automatic settings</b>	Sets options automatically for the UDF file system. We recommend that you select this entry.
<b>Manual settings</b>	Enables you to manually define the UDF partition type and the file system version.
<b>Enable Xbox™ compatibility mode</b>	Creates a disc that is compatible with Xbox™.

### 6.1.4 Label tab

The **Label** tab provides options for configuring the name of the disc. The **Automatic** area is always available. The **Manual** area is only available if multiple file systems have been selected for the disc type, e.g. the **ISO 9660 + Joliet** entry on the **ISO** tab for instance.

The following configuration options are available in the **Automatic** area:

<b>Automatic</b>	Enables the <b>Disc name</b> text box
<b>Disc name</b>	Defines the name of the disc.

The **Manual** area enables you to enter a unique disc name for each file system. The restrictions for this file system also apply in connection with the given character set. Characters not allowed are replaced by underscores. The following text boxes are available:

<b>Manual</b>	Enables the text boxes in the <b>Manual</b> area.
<b>ISO 9660</b>	Defines the name for the ISO 9660 file system.
<b>Joliet</b>	Defines the name for the Joliet file system.
<b>UDF</b>	Defines the name for the UDF file system.

The following button is available in the **Advanced** area:

<b>More Labels</b>	Opens the <b>More Labels</b> window where you can enter additional information on the disc such as the <b>Publisher</b> for instance.
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### 6.1.5 Audio CD tab

The **Audio CD** tab provides options for configuring the Audio CD.

The following check box is available in the **General** area:

<b>No pause between tracks</b>	Allows the audio files to merge into one another on the Audio CD without a pause (just like in live recordings). If the check box is disabled, there are pauses of two seconds between the audio files.
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The following check box is available in the **CD Text** area:

<b>Write on CD</b>	Enables the option for writing CD Text. With CD players that support CD Text, the title of the CD, the name of the audio file as well as of the artist appear in the display.
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In the **Edition** area you can enter additional information about the Audio CD such as the producer or comments for instance.

### 6.1.6 Boot tab

The **Boot** tab provides configuration options for the bootable disc. The following configuration options are available in the **Source of boot image data** area:

<b>Bootable logical drive</b>	Selects a logical drive for the template data.
<b>Image file</b>	Selects an image file for the template data.
<b>Browse</b>	Opens the <b>Open</b> window where you can select an image file.
<b>Boot locale</b>	Selects the language that appears when the drive boots

You can configure expert settings in the **Advanced** area. It may be necessary to make changes for certain image files. Refer to the documentation for relevant information on the boot image. We recommend that you only change the settings if you are familiar with creating bootable discs and boot images. The following configuration options are available:

<b>Enable expert features</b>	Enables the following configuration options.
<b>Kind of emulation</b>	Selects an emulation type.
<b>Boot message</b>	Defines the message that opens when the drive boots.
<b>Load segment of sectors</b>	Defines where the boot image starts and how the sectors behave after booting.
<b>Number of loaded sectors</b>	Defines how many sectors will be loaded.

## 6.2 Creating a new compilation

To create a new compilation, proceed as follows.

1. Select the disc type you want from the drop-down menu in the **New Compilation** window.



The recorder you have installed will determine which disc type (**CD**, **DVD**, **HD DVD** and/or **Blu-ray Disc**) can be burned. If the recorder can only burn CDs, the drop-down menu is grayed out. But with Nero Image Recorder which is included in Nero Linux you will always be able to create an image (see [Image file](#)) even you have not installed a recorder.

→ The drop-down menu displays the disc formats that can be burned using this disc type.

2. Select the disc format you want from the drop-down menu.

→ The tabs for this disc format are displayed.



Select the **Copy CD** and **Copy DVD** entries to go to the copy process (see [Copying discs](#)).

3. Configure the options you want in the tabs (see [New Compilation window](#)).

4. Click on the **New** button.

→ The **New Compilation** is closed and the selection screen is opened.

→ You have successfully created a new compilation. Now you can add files to the compilation (see [Selecting a file](#)).



## 7 Selecting a file

### 7.1 Selection screen

The selection screen is the starting point for work that you want to do on compilations. The selection screen is opened in the main screen after you select the disc type and format and click on the **New** button.

The selection screen consists of the Compilation Area, the Browser Area and a capacity scale.

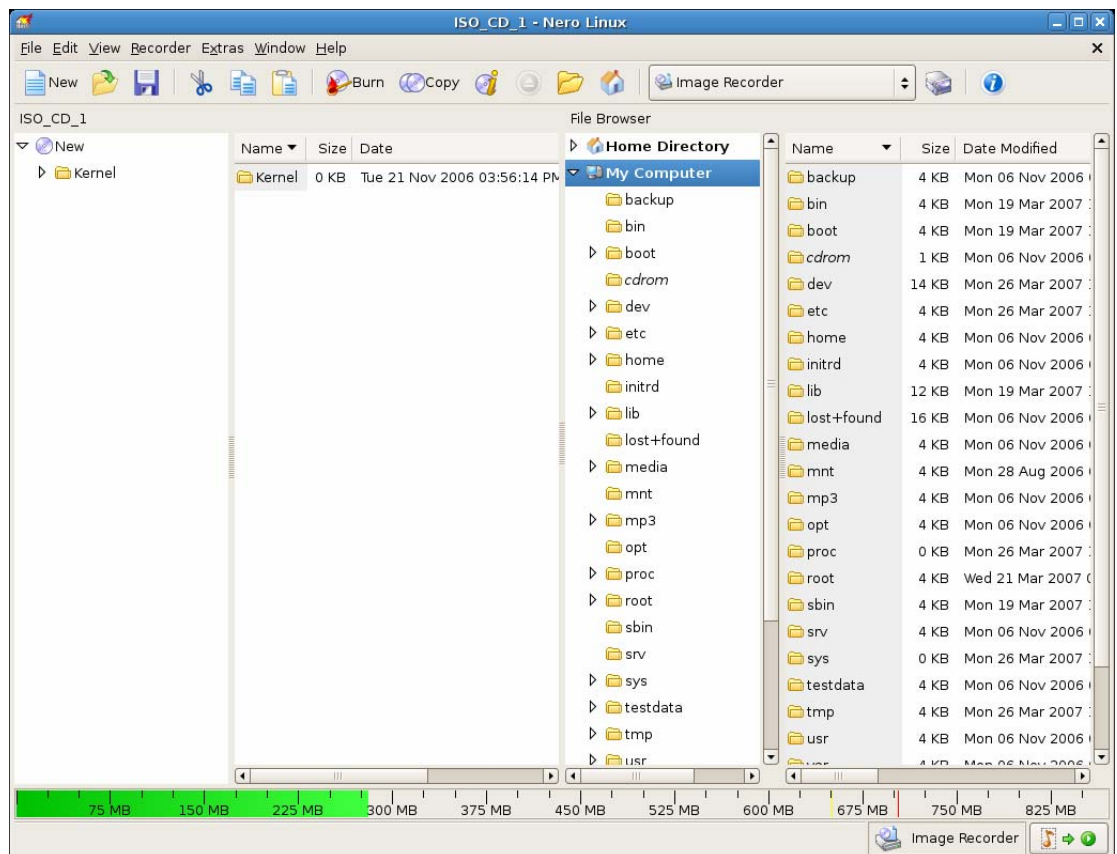



Fig. 3: Selection screen for the disc type CD-ROM (ISO)

The Compilation Area is named after the relevant compilation. Files and folders are compiled here for burning.

In the Browser Area (**File Browser**) you can find the elements that you want to burn.



If the Browser Area is hidden, you can show it again using the  button.

The bottom margin of the screen contains a capacity scale in MB (for data discs) or min (for Audio CDs). The exact magnitude of the scale will depend on which disc type you have selected.

When you are compiling files, a capacity bar indicates how much space the files need on the disc. The color of the capacity bar indicates whether the data will fit on the disc or not:



Green capacity bar	The data will fit on the disc.
Yellow capacity bar (from the yellow mark on the scale)	The data might fit on the disc. The size of the disc that has been inserted will determine whether the data will fit or not.
Red capacity bar (from the red mark on the scale)	The data will not fit on the disc. (unless you have inserted an oversize disc.)

The yellow and red marks are set by default for discs that are commercially available. The disc type you have selected will determine the exact scale value.



For example, blank CDs are available with a capacity of 650 MB or 700 MB. Therefore the yellow mark is set for CDs at 650 MB and the red at 700 MB.




If the capacity scale is hidden, you can show it again by clicking on the menu **File > Options > Show compilation size** and by enabling the check box **Show compilation size in the Nero Linux status bar**.

## 7.2 Selecting files

You can select files by dragging them from the browser to the compilation area in the selection screen. The same principle is used for all disc formats.

To select and compile files, proceed as follows:

1. Select the files/folders that you want to burn from the **Browser Area**.
  2. Drag the required files/folders into the compilation area.
    - ➔ The files/folders are displayed in the compilation area and the capacity bar indicates how much space is being used on the disc.
  3. If you want to save the compilation with the selected files:
    1. Click on the  icon.
      - ➔ The **Save As** window is opened.
    2. Select a file name and a storage location and click on the **Save** button.
      - ➔ The compilation is saved and the **Save As** window is closed.
- ➔ You have successfully selected the files for burning and can now start the burn process (see [Burning a compilation](#)).

## 7.3 File selection details

There are certain details that you need to bear in mind when selecting files.

### 7.3.1 Audio CD

Source audio files for an Audio CD may be contained on your hard drive as compressed audio files, or originate from one or more Audio CDs.



Audio CDs have been available on the market with a copy protection for some time now. It is not possible to either play or copy these using a computer. The copy protection is identifiable by a notice on the cover of the original CD.

You can work on the audio files in the compilation or change the properties (see [Audio Track Properties window](#)).

### 7.3.2 Mixed Mode CD and CD EXTRA

The selection screen for the disc formats mixed mode CD and CD EXTRA contains one compilation area for audio tracks and one for data files.

To select files, proceed as follows:

1. If you want to insert data files, click on the **Data** button.  
→ The compilation area for data files is opened.
2. If you want to insert audio files, click on the **Audio** button.  
→ The compilation screen for audio files is opened.
3. Proceed with the file selection (see [Selecting files](#)).

### 7.3.3 miniDVD

The selection screen for the disc format miniDVD contains two preset folders in the Compilation Area: **AUDIO\_TS** and **VIDEO\_TS**.

To select files, proceed as follows:

1. Drag the existing DVD folder structure of the video title ("VIDEO\_TS" folder) from the Browser Area into the **VIDEO\_TS** folder in the Compilation Area.  
→ The files are displayed in the compilation area and the capacity bar indicates how much space is required on the disc.
2. Proceed with the file selection (see [Selecting files](#)).

## 7.4 Audio Track Properties window

In the **Audio Track Properties** window you can view the properties of a selected audio file, i.e. of a track, in the compilation, change it if necessary and edit the audio file. You can open the window via the menu **Edit > Properties** menu.

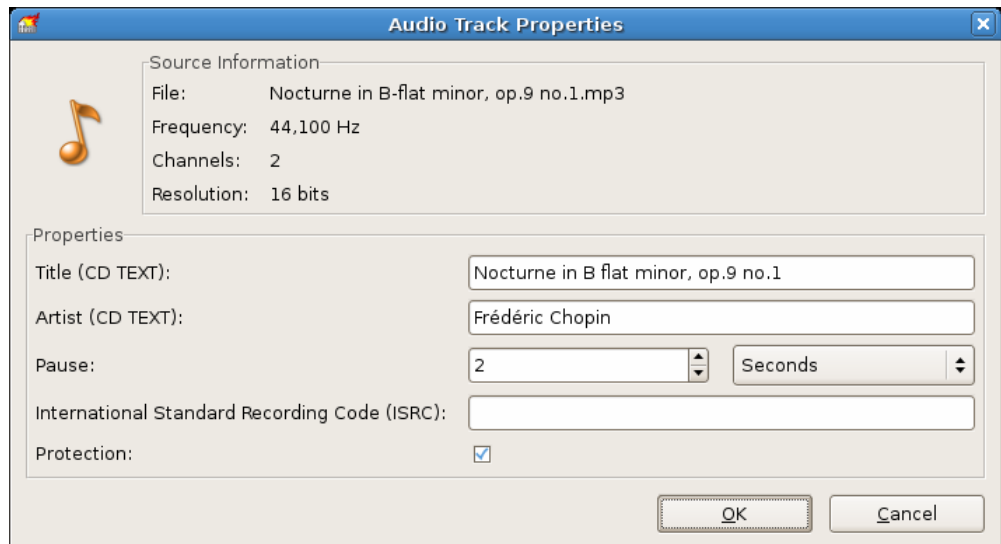


Fig. 4: **Audio Track Properties** window

General information on the selected audio file is displayed in the **Source information** area.

The **Properties** area offers the following configuration options:

<b>Title</b>	Defines a title which is saved as CD Text.
<b>Artist</b>	Defines the artist which is saved as CD Text.
<b>Pause</b>	Defines the length of the pause between this and the subsequent audio file. You can specify the length of the pause in seconds or in sectors.
<b>International Standard Recording Code</b>	Identifies the CD title using a 12-figure digital code. The ISRC is entered in the subcode and included silently. If you do not know the ISRC, you should leave this text box blank.
<b>Protection</b>	Enables copy protection.

## 8 Burning a compilation

In order to burn your compilation, you must first select a recorder. Then start the burn process. Before Nero Linux burns the disc, the **Burn Compilation** window is opened where you can select or check burn options.

### 8.1 Choose recorder

If you have installed multiple recorders, select a suitable recorder for burning. To do this, proceed as follows:

1. Click on the icon .
  - The **Choose recorder** window is opened.

2. Mark the relevant recorder.



The window shows useful information on the recorder, e.g. which disc types are supported.

3. If you would like to burn to a blank DVD, you can define the Book Type settings.



The Book Type determines which specification is recognized by the DVD player. With Nero Linux you can define or change the Book Type. This is recommended particularly if your DVD player has difficulties with self-burned DVDs of the specification DVD-, DVD+ or DVD-RW. In this case, set the Book Type to **DVD-ROM**.

1. Click on the **Options** button.
2. Select the required option from the **Book Type Settings** drop-down menu.

Four Book Type settings are available:

**Automatic:** automatically selects the most suitable Book Type for this DVD.



**DVD-ROM:** sets the Book Type to DVD-ROM. Select this option if the DVD should play on multiple DVD players.

**Physical disc type:** selects the Book Type which is specified on the DVD.

**Current recorder setting:** leaves the Book Type setting to the recorder.

4. Click on the **OK** button.
  - The selected recorder is accepted and the **Choose recorder** window closed.
  - You have successfully selected a recorder.

## 8.2 Burn Compilation window

In the **Burn Compilation** window you can set or check the required burn options and then start the actual burn process.

The **Burn Compilation** window consists of a drop-down menu, a selection list, various tabs and buttons.

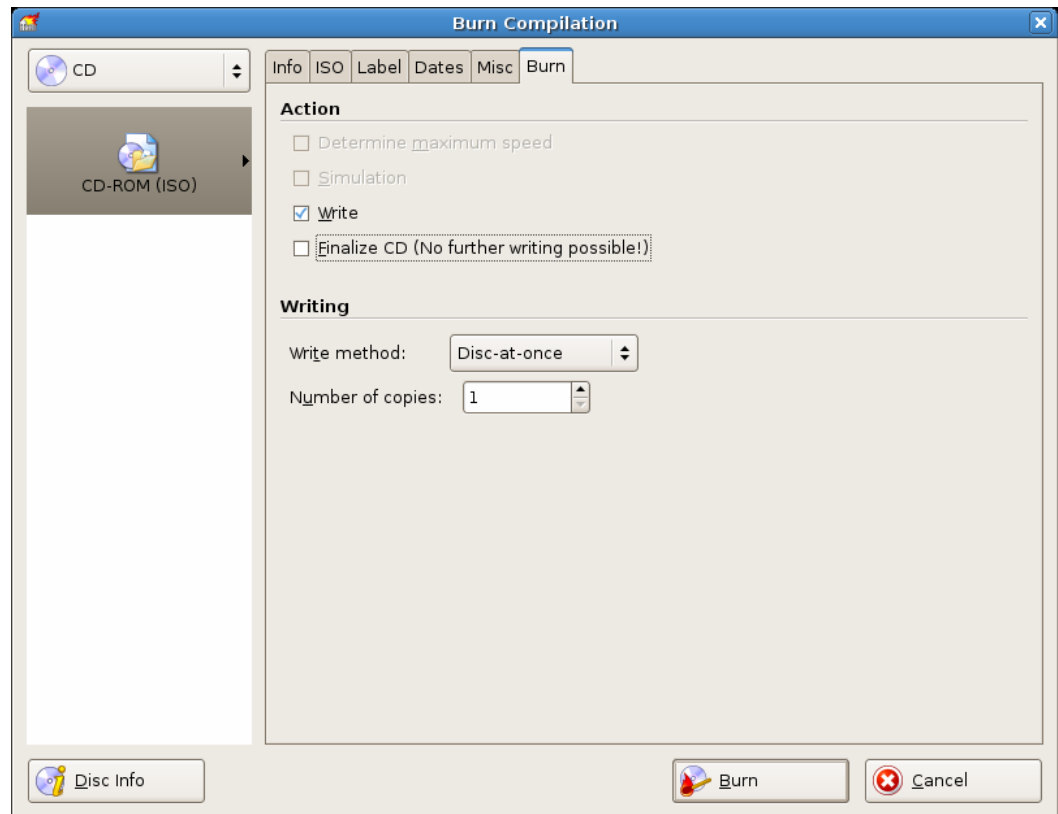


Fig. 5: **Burn Compilation** window for the disc type CD-ROM (ISO)

The selected disc format is displayed in the selection list. If multiple disc types are available for this disc format, and if you have installed a suitable recorder, you can select another disc type from the drop-down menu.

The following buttons are available:

<b>Disc Info</b>	Displays information on the disc inserted such as contents (if available) or available capacity for instance.
<b>Burn</b>	Starts the burn process if a recorder is connected. If a recorder is not connected, the <b>Save Image File</b> window is opened (see <a href="#">Creating an image file</a> ). This button is only available if the <b>Burn</b> check box is enabled.
<b>OK</b>	Accepts all changes and closes the window. This button is only available if the <b>Burn</b> check box is disabled.
<b>Cancel</b>	Closes the <b>Burn Compilation</b> window.

## 8.3 The Burn tab

The **Burn** tab provides options for the burn process.

The following check boxes are available in the **Action** area:

<b>Determine maximum speed</b>	Determines how quickly the compiled files can be accessed.
<b>Simulation</b>	Simulates burning. In the process the simulation performs all steps that are also carried out during burning with the exception of setting the laser beam. A test determines whether there is a constant flow of data.
<b>Write</b>	Enables the <b>Burn</b> button.
<b>Finalize disc</b>	Closes or fixes the disc so that you cannot write to this disc anymore. Depending on the disc format, finalizing may be necessary.  Nero Linux automatically enables the check box for the relevant disc formats.



The speed test and simulation are not required for recorders that have a function for protecting against buffer underruns.

The following configuration options are available in the **Write method** area:

<b>Write method</b>	Selects the method used to burn the disc. <b>Disc-at-once</b> and <b>track-at-once</b> are available.  <b>Disc-at-once:</b> burns the entire disc in one go without having to switch off the laser between individual audio files. <b>Track-at-once:</b> burns each audio file (track) separately onto the disc, i.e. that the laser is switched off and switched on again after each audio file.
<b>Number of copies</b>	Defines the number of discs that are to be burned. The default is set to one disc.
<b>Buffer underrun protection</b>	Provides buffer underrun protection. This check box is only available if the selected recorder supports a method for protecting buffer underruns.
<b>Verify written data</b>	Checks the data written to the disc after the burn process. You can use this option particularly when burning backups to ensure that all data has been written correctly.  This check box is only available if the selected recorder is not the Nero Image Recorder.

## 8.4 Starting the burn process

To start the burn process, proceed as follows:

1. Click on the **Burn** button in the main screen.
  - The **Burn Compilation** window is opened; the **Burn** tab is on top.
2. Check or select the options in the individual tabs.
3. Insert a corresponding blank disc and click on the **Burn** button.



Many CD players cannot read rewritable CDs (CD-RW). You should therefore use normal CD-ROMs for burning Audio CDs.

- The burn process starts. On the screen a progress bar indicates the progress being made by the burn process.  
When the burn process has finished, a dialog box is opened.

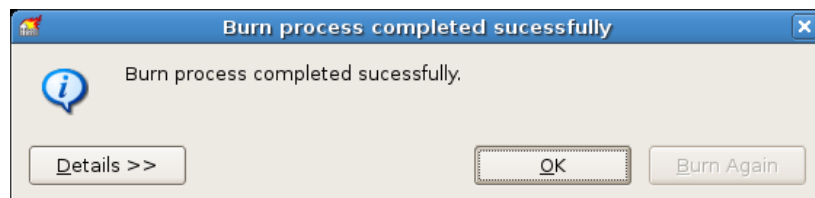


Fig. 6: "Burn process completed successfully" dialog box

4. If you would like to display the extended area with the event log, click on the **Details** button.
5. If you would like to start another burn process with the same compilation, click on the **Burn Again** button.
6. Click on the **OK** button.
  - The dialog box is closed.
  - You have successfully burnt a disc.

## 9 Bootable disc

Using Nero Linux you can create a bootable disc with which the computer can be started without having to access the hard drive. For this reason a bootable CD is often used as an "emergency disc" to start the computer if it is not possible to access the hard drive.

Bootable discs are created in accordance with the "El Torito" standard, an extension to the ISO-9660 standard, which defines the structure of data discs. The CD contains a boot image and an ISO part. The boot image contains all files that are required to load the operating system and to start the computer. The ISO part can contain any number of data files that you can back up using this method.

### 9.1 Booting requirements

To ensure that a computer can boot from disc, the start sequence must be set in the BIOS of the computer in such a way that the drive is addressed first as the boot drive (start sequence CD-ROM, C, A for instance). In the case of a SCSI CD-ROM drive, this must be connected to a SCSI adapter with a separate BIOS whose settings can be modified accordingly. (This will only work when there are no IDE hard drives present as these precede the SCSI adapter in the boot sequence).

When booting from a disc, you can only start an operating system that does not write to the disc, such as "MS DOS" or "Linux". During booting Microsoft® Windows® 2000 and Microsoft® Windows® XP write to the disc from which they are being booted. This is not possible with a disc and so the process is canceled and the PC cannot be started.

### 9.2 Bootable disc template

For Nero Linux the template for creating a bootable disc can be either a logical drive or a drive image file, which contains the contents of a drive as a file sector for sector. If the template for the bootable disc is a logical drive, the boot disc will emulate this when the system is booting. There are three emulation types:

- Floppy emulation: this requires a bootable floppy disk for creating the boot disc. At startup the bootable disc emulates a floppy disk in drive A:. In the process, the drive letters increment, so that Drive A: corresponds to the bootable disc. Floppy disk drive A: can be accessed as B: after booting. The volume of the start data is limited by the capacity of the floppy disk (e.g. 1.44 MB).
- Hard drive emulation: a bootable hard drive is required to create the bootable disc. At startup the disc emulates Drive C:. All drive letters from Drive C: increment by one. The volume of the start data is limited by the capacity of the CD (e.g. 700 MB) or DVD (8.5 GB). If, for instance, you own a 200 GB hard drive with only one (200 GB) partition, you cannot create a bootable disc from it without re-partitioning your hard drive accordingly beforehand.
- No emulation: in this process the drive names are not changed. This type is used for bootable installation CDs. This setting is intended for users who do not require any floppy or hard drive emulation and who want to install their own device driver.



## 9.3 Creating and burning a bootable disc

To create a bootable disc, proceed as follows:

1. Click on the **New** button in the main Nero Linux screen.
  - ➔ The **New Compilation** window is opened.
2. If you want to create a bootable CD, select the option **CD** from the drop-down menu and the option **CD-ROM (Boot)** from the selection list.  
If you want to create a bootable DVD, select the option **DVD** from the drop-down menu and the option **DVD-ROM (Boot)** from the selection list.
  - ➔ The tabs for the bootable CD are displayed; the **Boot** tab is on top.
3. If the template data for the bootable disc should originate from a logical drive:
  1. Select the **Bootable logical drive** option button in the **Source of boot image data** area.
  2. Select the option you want from the drop-down menu.
4. If the template data for the bootable disc should originate from an image file:
  1. Select the **Image file** option button in the **Source of boot image data** area.
  2. Click on the **Browse** button and select the desired image file.
  3. Select the language that should appear while the system is booting from the **Boot locale** drop-down menu.
  4. Enable the **Enable expert features** check box and select the emulation type for the image file from the **Emulation type** drop-down menu.
5. Select any other options required in the tabs (see [New Compilation window](#)).
6. Click on the **New** button.
  - ➔ The selection screen is displayed.
7. Select the files/folders that should be written to the ISO part of the bootable disc and drag them into the Compilation Area.
  - ➔ The files/folders are displayed in the compilation area and the capacity bar indicates how much storage space is required on the disc.
8. Start the burn process (see [Starting the burn process](#)).
  - ➔ You have successfully burnt a bootable disc.

## 10 Image file

You can use Nero Linux and Nero Image Recorder to create an image file. Nero Image Recorder is automatically installed while Nero Linux is being installed. An image file is an individual file on the hard drive that contains an image of a complete disc. You can burn copies of this image file as often as you like. The image file is exactly the same size as the original files.



The following estimate applies to Audio CDs: the image file requires a capacity of approximately 10 MB for every minute of audio data.

### 10.1 Creating an image file

To create an image file, proceed as follows:

1. Click on the **New** button.
2. Create a new compilation of your choice (see [New compilation](#)).



Using Nero Linux you can also create image files for disc types that the installed recorder cannot burn. You can enable this function via the **File > Options > Expert Features** menu, **Enable all supported recorder formats for image recorder** check box. The drop-down menu in the **Compilation** window then makes available all supported disc types (CD, DVD, HD DVD and Blu-ray disc).

3. Select the files that you want to burn (see [Selecting files](#)).
4. If you have installed multiple recorders, select Nero Image Recorder from the drop-down menu.
5. Click on the **Burn** button.
  - ➔ The **Burn Compilation** window is opened, the **Burn** tab is on top.
6. Click on the **Burn** button.
  - ➔ The **Save Image File** window is opened.
7. Specify a file name and a storage location for the image file and click on the **Save** button.
  - ➔ The image file is created and saved in the selected storage location. On the screen, a progress bar indicates the progress made while the file is being created. Once the create process is over, a dialog box is opened.
8. Click on the **OK** button.
  - ➔ The dialog box is closed, you have successfully created the image file.

## 10.2 Burning an image file

To burn a saved image file, proceed as follows:

1. Select a recorder from the drop-down menu (not Nero Image Recorder).
2. Click on **Recorder > Burn Image**.
  - ➔ The **Open** browser window is opened.
3. Select the desired image file and click on the **Open** button.
  - ➔ The **Burn Compilation** window with the **Burn** tab is opened.
4. Proceed with the burn process (see [Burning a compilation](#)).
  - ➔ You have successfully burnt an image file.

## 11 Copying discs

You can copy discs using Nero Linux. There are two methods for this:

- On-the-fly copying
- Copy over image

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

### 11.1 On-the-fly copying versus copy over image

#### 11.1.1 On-the-fly copying

When using the on-the-fly method, insert the original disc into a drive and a blank disc into the recorder. 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 very fast 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 recorder for burning. The following requirements apply to the drive and recorder:

- The recorder must have a function for protecting against buffer underruns or the drive must be capable of delivering the data sufficiently fast. The read speed must be at least as high as the write speed to ensure that a buffer underrun does not occur. It is more reliable when the read speed is twice as fast as the write speed.
- The drive must be capable of delivering information on the number and type of sessions, otherwise Nero Linux may not be able to produce an exact copy.

On-the-fly copying can have the following disadvantages:

- If the recorder does not have a function for protecting against buffer underruns, the on-the-fly method is highly sensitive to read errors. The reason for this is as follows: if errors occur while the disc is being read because it is scratched, it is not possible to try to eliminate the error by reading the disc several times for example because, in contrast to the copy-over-image method, there is not enough time (danger of buffer underrun).
- Index positions in audio files get lost. The reason for this is as follows: index positions only become identifiable if the corresponding position on the CD is read. However, quick copies can only be burned using the disc-at-once method. With this method the information on the index positions must be available before the burn process begins. This means that Nero Linux cannot copy over index positions.
- The quality of audio data read in may suffer. The reason for this is as follows: Nero Linux reads several megabytes of data at a time from the drive, transfers the data to the Nero Linux buffer and writes the data to the recorder. If the data transfer slows down because the buffer in Nero Linux is full for instance, the reading head of the drive has to jump back to a previous position. Some drives cannot position the reading head precisely for Audio CDs, which means that corrupt audio data may be transferred sometimes.

### 11.1.2 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 an image copy takes longer, but often produces better results.

You must have sufficient space on the disc to use the copy-over-image method (see [Image file](#)).

Copying using an image copy is particularly suitable in the following situations:

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

## 11.2 Compilation window

In the **Compilation** window, define the options for copying at the beginning of the copy procedure. You can use the **Copy** button to open the window.

The **New Compilation** window consists of a drop-down menu, various buttons and tabs.

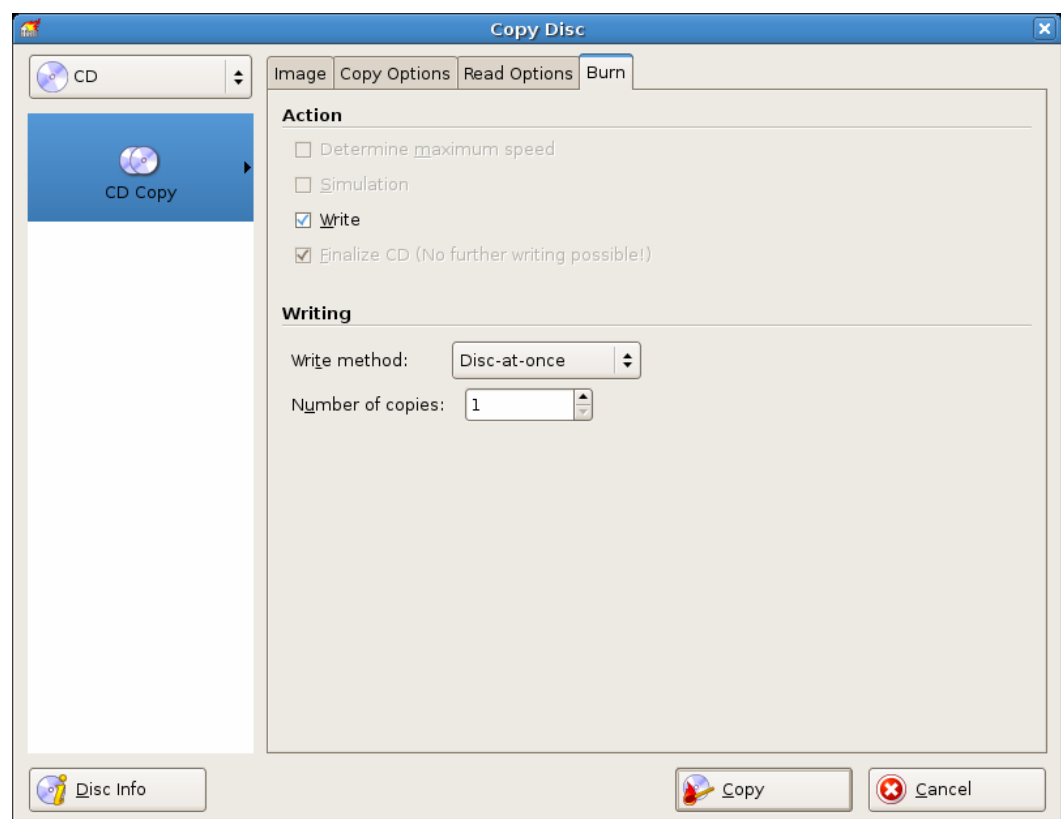


Fig. 7: **Compilation** window, Copy

The drop-down menu contains the options **CD**, **DVD**, **HD DVD** and **Blu-ray Disc**. Only those disc types supported by the recorder are displayed. If the recorder can only burn CDs, the drop-down menu is grayed out.

The following buttons are available:

<b>Disc Info</b>	Displays information on the disc inserted such as contents (if available) or available capacity for instance.
<b>Copy</b>	Starts the copy process.
<b>Cancel</b>	Closes the <b>New Compilation</b> window.

The following tabs are available:

<b>Image</b>	Displays the path to the temporary image file and provides information on the speed of the hard drive (see <a href="#">Image tab</a> ).
<b>Copy Options</b>	Contains options for configuring copying (see <a href="#">Copy Options tab</a> ).
<b>Read Options</b>	Contains options for configuring reading of the original disc (see <a href="#">Read Options tab</a> ).
<b>Burn</b>	Contains options for configuring the burn process (see <a href="#">The Burn tab</a> ).

### 11.2.1 Image tab

The **Image** tab provides the **Image file** area. The **Image file** area is only enabled, if the **On-the-fly** check box is disabled on the **Copy Options** tab.

In the **Image file** area the path to the temporary image file is displayed and the following configuration options are available:

<b>Browse</b>	Opens the <b>Save As</b> window where you can specify a file name and a directory where the temporary image file should be stored.
<b>Delete image file after disc copy</b>	Deletes the temporary image file when the copy process is finished.

### 11.2.2 Copy Options tab

The following configuration options are available on the **Copy Options** tab:

<b>General area</b>	
<b>On-The-Fly</b>	Creates the copy using the on-the-fly method. If the check box is disabled, the copy is created using the copy-over-image method.
<b>Source area</b>	
<b>Drive</b>	Selects the drive for reading the disc. If a copy over image is created, we recommend that you select the recorder for reading in.
<b>Read speed</b>	Defines the speed at which the disk is read in.

### 11.2.3 Read Options tab

You can select options for reading the original disk on the **Read Options** tab. The following options are available:

<b>Profile area</b>	
<b>Profile selection</b>	Selects predefined copy options or a user-defined setting. In the case of predefined copy settings Nero Linux sets the configuration options automatically. You can select the configuration options yourself in the case of a customized setting.
<b>Data Track area for the disc type <b>CD</b></b>	
<b>Ignore read errors</b>	Ignores read errors on the original disc and continues the read process. If the check box is disabled, Nero Linux may interrupt the burn process depending on the type of error that occurs.
<b>Write defect sectors</b>	Still passes on corrupt sectors (that have caused read errors) for burning. If the check box is disabled, corrupt sectors are not passed on and remain blank.
<b>Read sectors in raw mode</b>	Reads PQ subchannel data.
<b>Read all subchannel data</b>	Reads all subchannel data.
<b>Audio tracks area for disc type <b>CD</b></b>	
<b>Ignore read errors</b>	Ignores read errors on the original disk and resumes the read process. If the check box is disabled, Nero Linux may interrupt the burn process depending on the type of error.
<b>Read indexes of audio data</b>	Reads the audio file indexes.
<b>Read all subchannel data</b>	Reads all subchannel data.
<b>Advanced area for the disc type <b>CD</b></b>	
<b>Read Media Catalog Number and ISRC</b>	Reads the media catalog number, a unique number worldwide for compilations and the ISRC (International Standard Recording Code), a unique number worldwide for audio recordings.
<b>Use jitter correction</b>	Removes scratches from audio and video files.
<b>Error correction area for disc type <b>DVD</b></b>	
<b>Read with error correction</b>	Performs error correction while reading. In the process, the checksum of a corrupt sector is adjusted so that the sector in itself is consistent.
<b>Read retry count</b>	Establishes the number of attempts that are made to correct errors.
<b>Fast reading without error correction</b>	Performs fast reading without error correction.
<b>Handling of non-correctable read errors area for disc type <b>DVD</b></b>	
<b>Ignore read errors</b>	Ignores read errors on the original disc. If the check box is disabled, Nero Linux may interrupt the burn process depending on the type of error.



With certain disc formats such as Audio CD for instance, read errors often have little or no impact because they are not perceptible when the CD is played.



Subchannel data contains additional information such as CD Text or information on positions for instance.

## 11.3 Copying a disc



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



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

To copy a disc, proceed as follows:

1. Click on the **Copy** button in the main screen.  
→ The **New Compilation** window is opened.

2. Select the disc type you want from the drop-down menu.



Your installed recorder or drive will determine which disc type (**CD**, **DVD**, **HD DVD** and/or **Blu-ray Disc**) you can select. If the recorder can only burn CDs, the drop-down menu is grayed out. But with Nero Image Recorder, which is installed in Nero Linux, you will always be able create an image (see [Image file](#)) even if you have not installed a recorder.

3. Select the options required in the tabs (see [Compilation window](#)).
4. If you want to copy discs using the copy-over-image method:
  1. Disable the **On-the-fly** check box on the **Copy Options** tab.
  2. Insert the disc that you want to copy into the recorder.
  3. Click on the **Copy** button.  
→ A screen is displayed and a progress bar indicates the progress made while the temporary image file is being created. When the image file has been created, the disc is ejected. The **recorder name: Waiting for Disc** window is opened.
  4. Remove the ejected original disc and insert the blank disc.  
→ The burn or copy process starts.  
On the screen a progress bar indicates the progress being made during the burn or copy process.
5. If you want to copy using the on-the-fly method:
  1. Enable the **On-the-fly** check box on the **Copy Options** tab.
  2. Select the drive that is to contain the disc to be copied from the **Drive** drop-down menu.
  3. Insert the disc that you want to copy into the selected drive.
  4. Insert a blank disc.
  5. Click on the **Copy** button.



- The burn or copy process starts.  
On the screen a progress bar indicates the progress being made during the burn or copy process.
- 6. Proceed with the burn process (see [Starting the burn process](#)).
- You have successfully copied a disc.

## 12 Saving and converting audio files

Using Nero Linux you can convert an Audio CD into a format you require and save it to the hard drive. You can also convert (transcode) audio files saved on the hard drive into a different format.

### 12.1 Save Tracks window

In the **Save Tracks** window you can define the settings for the audio files that are to be stored on the hard drive. The window consists of tabs and buttons. You can open the window by clicking on the **Extras > Save Tracks** menu.

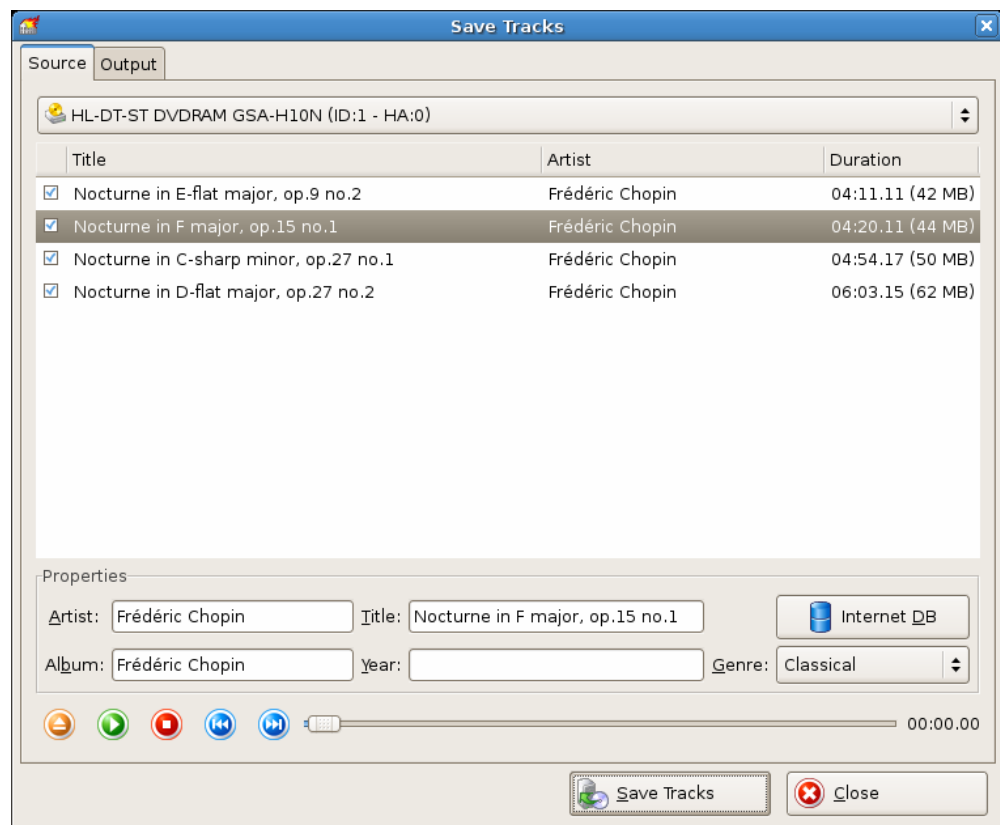


Fig. 8: **Save Tracks** window - **Source** tab

The following tabs are available:

<b>Source</b>	Configures the source data (see <a href="#">Source tab</a> ).
<b>Output</b>	Sets output files configuration options (see <a href="#">Output tab</a> ).

The following buttons are available:

<b>Save Tracks</b>	Starts the save process.
<b>Close</b>	Closes the window.

### 12.1.1 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 configuration options are available:

Drive drop-down menu	Selects the drive where the Audio CD is inserted.
area <b>Title</b>	Displays the audio files on the Audio CD.
area <b>Properties</b>	Displays the properties of the selected audio track.
button <b>Internet DB</b>	Sends a query to the Internet Database <a href="http://www.freedb.org">www.freedb.org</a> to complete the properties of the Audio CD, if there is an appropriate entry.



Nero AG is not responsible for the [www.freedb.org](http://www.freedb.org) web page, we simply provide an interface to it.

### 12.1.2 Output tab

The output tab let you specify the output audio files properties.

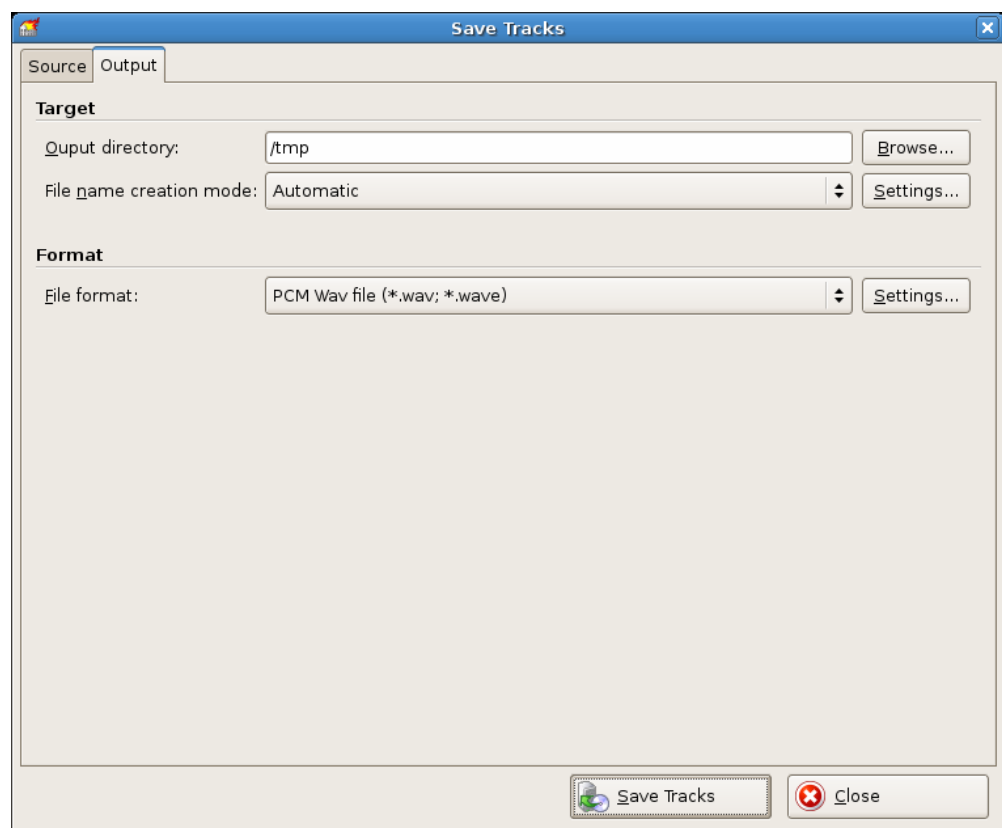


Fig. 9: **Save Tracks** window - **Output** tab

The following options are available in the **Target** and **Format** areas:

<b>Output directory</b>	Selects the storage location for the output file.
-------------------------	---------------------------------------------------

<b>Browse</b>	Opens a browser window where you can select a storage location.
<b>File name creation method</b>	Selects the method to be used for creating the name of the output file.
<b>Settings</b>	Opens a window where you can configure the file name creation if you select <b>Automatic</b> or <b>User defined</b> as method.
<b>Output file format</b>	Selects the output audio format for the selected audio file.
<b>Settings</b>	Opens a window where you can define options such as bit rate and frequency for the output audio file.

## 12.2 Saving audio files

Using Nero Linux you can store audio files from an Audio CD on the hard drive. In the process, the files are encoded, i.e. converted into a format that the computer can read. Mostly, the audio file is compressed.



Audio files from copy-protected Audio CDs cannot be saved using Nero Linux.

To save audio files, proceed as follows:

1. Insert the desired Audio CD into a drive.
2. Click on the **Extras > Save Tracks** button.  
→ The **Save Tracks** window is opened.
3. Select the audio tracks that you want to save in the **Track list**.



By default all audio tracks are selected.

4. Click on the **Output** tab.  
→ The **Output** tab is opened.
5. If you want to specify a storage location for the output files, click on the **Browse** button and select a path.
6. If you want to select a file name creation method, click on the **File name creation mode** drop-down menu and select a method.



The default setting for the method for default names is **Automatic**. If you select **User defined**, enter the desired name for the audio file.

7. Select the required output format from the **File format** drop-down menu.
8. If you want to define the encoding options:
  1. Click on the **Settings** button.  
→ A window is opened.

2. Depending on the selected output form, define the encoding options such as bit rate, encoding quality and frequency.
3. Click on the **OK** button.
  - The window is closed and the changes accepted.
9. Click on the **Save Tracks** button.
  - Conversion starts. The **Progress** window is opened and displays the progress made while saving. At the end of the save process, it is closed automatically.
10. Click on the **Close** button.
  - The **Save Tracks** window is closed.
  - You have saved individual audio files or an entire Audio CD to your hard drive.

## 12.3 Encode Files window

In the **Encode Files** window, the audio files that are to be encoded are selected and the properties for the output defined. You can open the window via the **Extras > Encode Files** menu.

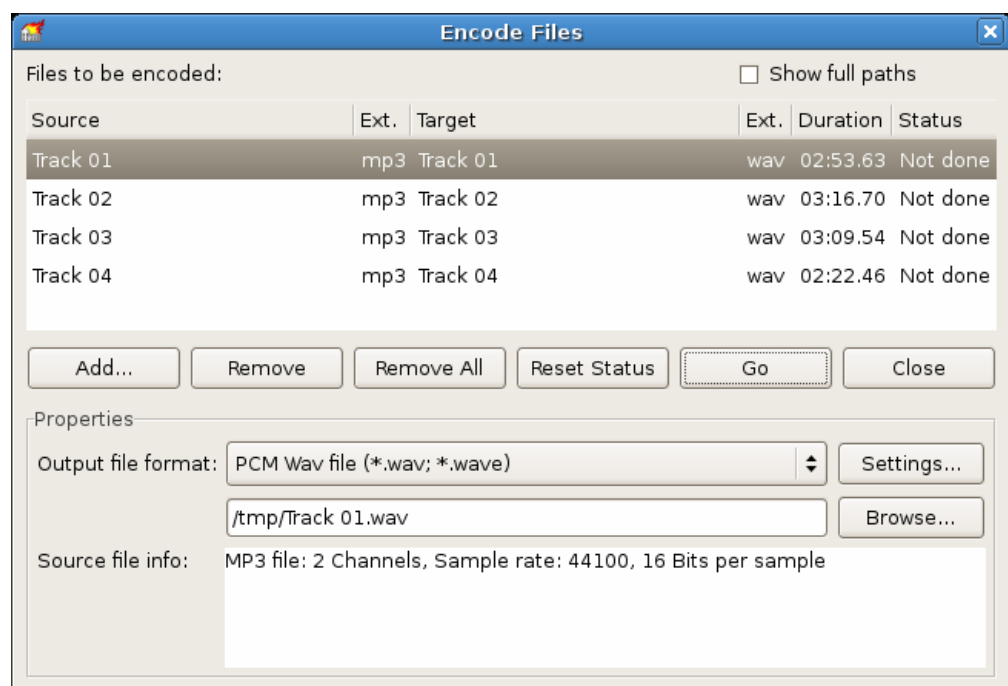


Fig. 10: **Encode Files** window

The window consists of a selection area and a properties area.

In the selection area the selected files are displayed in the **Files to be encoded** list. The following buttons and check boxes are available:

<b>Show full paths</b>	Displays the full source and destination paths for the files in the <b>Files to be encoded</b> list.
<b>Add</b>	Opens the browser window where you can select a file to add it to the list of files to be encoded.

<b>Remove</b>	This removes the selected file(s).
<b>Remove All</b>	Removes all files from the list of <b>Files to be encoded</b> .
<b>Reset Status</b>	Resets the status of the selected file to " <b>Not done</b> ".
<b>Go</b>	Starts the encode process.
<b>Close</b>	Closes the window.

The following configuration options are available in the **Properties** area:

<b>Output file format</b>	Selects the output audio format for the selected audio file.
<b>Settings</b>	Opens a window where you can define options such as bit rate and frequency for the output audio file.
<b>Target file/ Target directory</b>	Displays the storage location of the output file or output files.
<b>Browse</b>	Opens a browser window where you can select a storage location.
<b>Source file info</b>	Displays information on the selected audio file.

## 12.4 Converting audio files

Using Nero Linux you can transcode, i.e. convert audio files that are stored on the hard drive into a different format.

To transcode a file, proceed as follows:

1. Click on the **Extras > Encode Files** menu.  
→ The **Encode Files** window is opened.
2. Click on the **Add** button.  
→ The familiar browser window **Open** is opened.
3. Select the required file and click on the **Open** button.
4. Repeat the two previous steps for each file that you want to convert.
5. Select the required output format from the **Output file format** drop-down menu.
6. If you want to define encoding options:
  1. Click on the **Settings** button.  
→ A window is opened.
  2. Depending on the output format, define the encoding options such as bit rate, encoding quality and frequency.
  3. Click on the **OK** button.  
→ The window is closed and the changes accepted.
7. If you want to specify a storage location for the output files, click on the **Browse** button and select a path.
8. Click on the **Go** button.

- The **Progress** window is opened and displays the progress made while saving. At the end of the save process, the window is closed automatically. The status of the file that was transcoded is set to "**Done**".
- 9. Click on **Close**.
  - The **Encode Files** window is closed.
  - You have successfully transcoded your audio files.

## 13 Erasing a rewritable disc

Using Nero Linux you can erase rewritable discs, i.e. discs with the RW specification, as long as your recorder supports this function.

### 13.1 Erase Rewritable Disc window

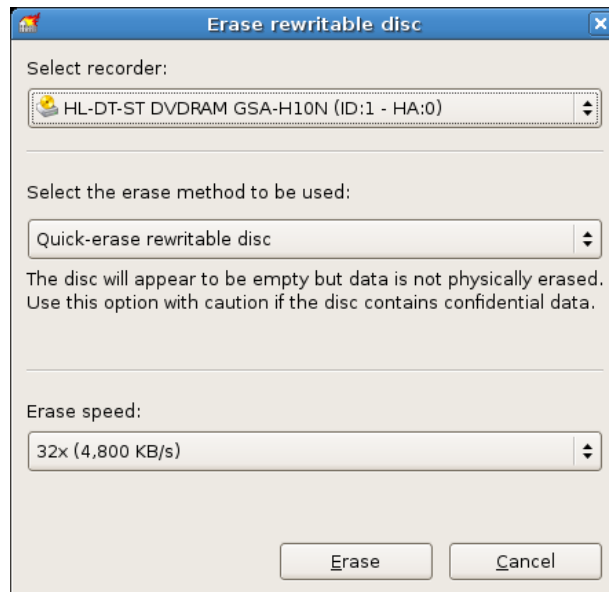


Fig. 11: **Erase Rewritable Disc** window

This window contains the following drop-down menus and configuration options:

<b>Select recorder</b>	Selects a recorder.
<b>Select the erase method to be used</b>	<p>Selects an erase method. Two options are available:</p> <p><b>Quick-erase rewritable disc:</b> does not physically erase the disc fully, but only the references to the existing contents. The disc will appear to be empty even though the data is still physically available. Erasing a disc using this method takes between one and two minutes.</p> <p><b>Full-erase rewritable disc:</b> physically erases all data from the disc. The contents cannot be restored. Erasing the disc using this method takes longer than the other method depending on the type of disc involved.</p>
<b>Erase speed</b>	Selects the speed at which the disc is erased.
<b>Erase</b>	Starts the erase process.
<b>Cancel</b>	Cancels the action and closes the window.



## 13.2 Erase Disc

To erase a rewritable disc, proceed as follows:

Requirement: your recorder must support this function.

1. Insert the disc that you want to erase.
2. Select the **Recorder > Erase Rewritable Disc** menu from the main Nero Linux screen.  
→ The **Erase Rewritable Disc** window is opened.
3. If you have installed multiple recorders, select the desired recorder from the **Choose recorder** drop-down menu.
4. Select an erase method from the **Select erase method to be used** drop-down list.



If you want to erase confidential data, use the "**full-erase**" method to physically erase all of the data from the disc. Otherwise third parties could restore the contents.

---

5. If required, select the erase speed from the **Erase speed** drop-down menu.
6. Click on the **Erase** button.  
→ The erase process starts. A progress bar in a window informs you about the progress being made by the erase process. When all data has been fully erased, the window is closed and the disc ejected.  
  
→ You have successfully erased a rewritable disc and can now write to the disc again.

## 14 Configuration

### 14.1 Configuration options

You can define options for working with Nero Linux in the **Options** window. Open the window by click on the **Options** entry in the **File** menu.

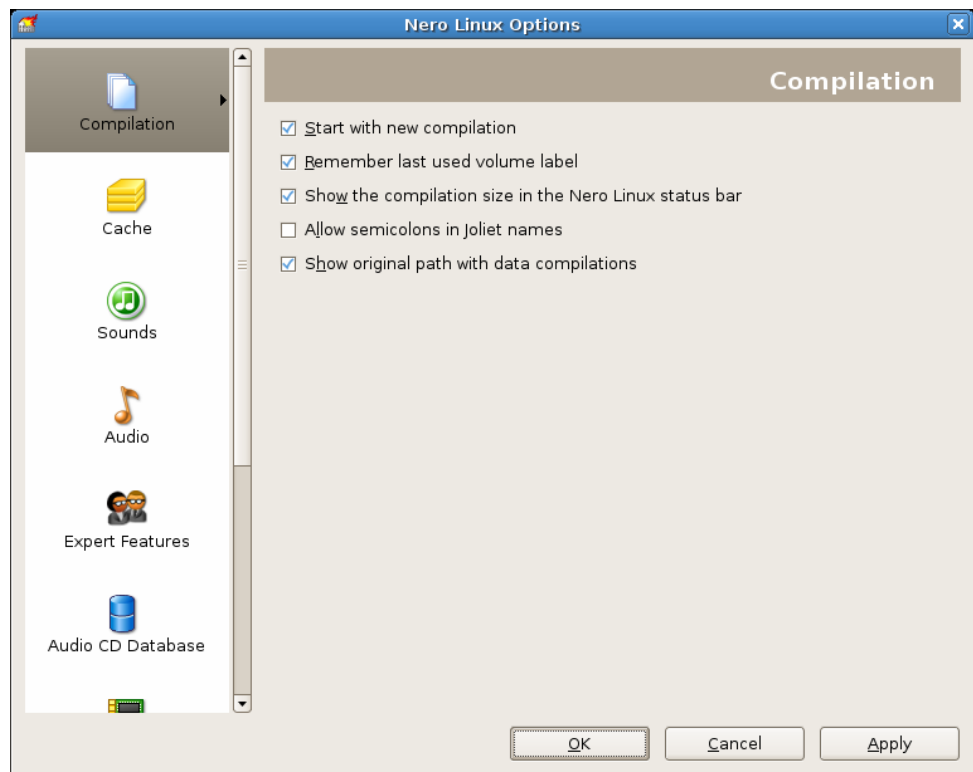


Fig. 12: **Options** window

The **Options** window contains the following sections [ @Barbara: das sind lt. unserem Redaktionsleitfaden eher "areas", oder ist das nicht spezifiziert im Englischen? ]:


Tab	Description
<b>Compilation</b>	Contains options for compilation and the selection screen.
<b>Cache</b>	Contains options for the cache.
<b>Sounds</b>	Contains selection options for sounds in connection with burn tasks.
<b>Audio</b>	Displays the directory for the audio plug-ins.
<b>Expert Features</b>	Contains options for configuring overburning and burning (see <a href="#">Expert Features</a> ). We recommend that you retain the default settings.
<b>Audio CD Database</b>	Offers the option to use the Internet database.
<b>Ultrabuffer</b>	Defines the size of the RAM buffer.
<b>System Settings</b>	Contains options for checking the system settings at application startup.

<b>File Browser</b>	Contains options for configuring the file browser.
<b>Misc</b>	Contains options for configuring compilations, burning, the user interface as well as advanced settings for Nero Linux.

## 14.2 Expert Features

The **Expert Features** tab in the **Options** window provides you with further configuration options for burning and overburning for instance.



Using Nero Linux you can overburn a disc beyond the specified capacity. You can display the capacity of a disc using the  button. Tolerances in the manufacturing process often cause the actual rewritable area on the disc to exceed the maximum specified capacity. This additional area is often 2-3 minutes long, but may also be shorter or longer. It is not technically possible to establish the precise extent of the excess capacity prior to burning.



During the overburn process, the following difficulties may arise:

Read errors, sound errors, incorrectly written data and error messages during the burn process.

Theoretically the recorder could be damaged.

The following configuration options are available:

<b>Enable Disc-at-once CD overburning</b>	Enables overburning for CDs in disc-at-once mode.
<b>Relative maximum overburning size:</b>	Defines the relative maximum overburning size.
<b>Absolute maximum overburning size:</b>	Defines the absolute maximum overburning size.
<b>Enable DVD overburning</b>	Enables overburning for DVDs. If the check box is enabled, you can specify the maximum DVD size in the text box.
<b>Enable generation of short lead-out</b>	Writes a short lead-out for CDs that are being burned in disc-at-once mode. This creates additional capacity of about 12 MB.
<b>Do not eject disc after the burn is complete</b>	Does not eject the disc after the burn process is complete.
<b>Reload the disc after the burn is complete</b>	Reload the disc after the burn process is complete.
<b>Allow to disable finalizing for burning a disc image</b>	Disables finalizing when an image file is saved.
<b>Enable all supported recorder formats for image recorder</b>	Enables all supported recorder formats for Nero Image Recorder. It is now possible to create compilations that the installed recorder cannot burn. You can therefore create a DVD compilation without a DVD recorder for instance and create an image file using Nero Image Recorder. The same applies for HD DVD and Blu-ray discs.

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## 16 Glossary

### Blue Book

Standard for CDs created in the formats CD Extra and Enhanced CD.

### Blu-ray Disc

Abbreviated to BD. The Blu-ray disc or Blu-ray is a possible successor to the DVD. The BD was developed by the BDA (Blu-ray-Disc Association) in response to high-definition video requirements. Their storage capacity is practically five times that of DVDs. Single-layer discs can store data volumes of up to 20 GB and dual-layer discs up to 50 GB. In BD recorders a blue-violet laser is used, which can write the data "more tightly" on the disc. The protective layer is also thinner.

### Book Type

The Book Type defines the specification (e.g. DVD-, DVD+, DVD-ROM) of a DVD and is stored in the lead-in. Even burned DVDs are sometimes not read by DVD players. This may be due to the fact that the players either cannot read or have difficulty in reading DVD-, DVD+ or DVD-RW. Using Nero Linux you can set the book Type of the self-burned DVD on DVD-ROM to guarantee playback.

### Bootable CD

Boot refers to the loading of the operating system on the computer when it starts up. This is normally done from the hard drive. If you do not want to or cannot boot from your hard drive, you can use a bootable CD to boot from the disc drive.

### Cache

Fast temporary storage (buffer), which is used in different areas in a computer.

### CD

Compact Disc. Widely used disc type. The following types of CD are available:

CD-ROM	Compact Disc-Read Only Memory. Various computer readable forms of data such as programs, picture or audio data, for instance, can be stored in this format.
CD-R	Compact Disc - Recordable. Write-once disc.
CD-RW	Compact Disc - ReWritable. A disc that can be written to more than once.

### CD-DA

Compact Disc - Digital Audio. The first standard for Audio CDs. An Audio CD consists of multiple audio files whereby one file generally corresponds to one title/song; in addition, each file is subdivided into sectors.

### CD-i

Compact Disc-Interactive. Format for multimedia CDs that combine video, audio, and data and can only be played using a CD-i player or CD-ROM drive that supports CD-i technology.

## CD Text

Additional information on the CD that can store the title and artists of the individual pieces for instance. CD Text is stored in the so-called lead-in area of the CD before the audio data starts.

Not all CD players support CD Text. Despite this a CD with CD Text can still be played in the player.

You must have a CD recorder which supports CD Text to enable the CD Text to be written to a CD. In particular, CD Text can only be written in disc-at-once mode. Please refer to the recorder selection dialog in Nero Linux to find out whether your recorder supports CD Text.

## Decoding

Decoding refers to the conversion of computer readable audio files (e.g. mp3) into Audio CD format. Decoding takes place at the same time as the burn process.

## Digitalization

Conversion of analog signals to digital signals.

## Disc

Disc is a data medium to which the data is saved. CD-R, DVD-R, and DVD+R are examples of write-once discs that are written to by a recorder and read by a player. Discs of the same type with different storage capacities are available, e.g. for DVD-R with 4.38 GB or as DVD-R DL (Dual Layer, with two data layers) with 7.95 GB.

## Disc-At-Once (DAO)

An entire CD/DVD is recorded without ever stopping the laser. This format is best for Audio CDs that will be played in home and car stereo equipment.

## DVD

**D**igital **V**ersatile **D**isc or **D**igital **V**ideo **D**isc. DVD was originally designed for the movie and games market. In the meantime it has become possible to burn data and certain video films to a DVD-Video disc and play them on all DVD-ROM drives. The following types are available:

DVD-R	The DVD-R is a non-rewritable format that is compatible with most DVD-ROM drives and DVD players.
DVD-RAM	Format of rewritable media that is compatible with most DVD-ROM drives and DVD players. Files cannot be copied and deleted.
DVD-RW	DVD <b>Re</b> Writeable. The DVD-RW is a rewritable disc that fulfills the same functions as a DVD-R, but is compatible with fewer DVD-ROM drives and DVD players.
DVD+R/RW	Format developed in cooperation with Hewlett-Packard, Mitsubishi Chemical, Philips, Ricoh, Sony, and Yamaha. DVD+RW is a rewritable format that is fully and immediately compatible with DVD players and DVD-ROM drives.

## EDC/ ECC

**E**rror **D**etection **C**ode/**E**rror **C**orrection **C**ode. Used to identify and correct scan errors which may be caused by scratches or dirt on the surface of a CD.

**Emulation**

Simulation of the structure and function of a system, e.g. a bootable disc can "emulate" a floppy drive.

**Encode**

Encoding is the conversion of audio files that are located on an Audio CD into an audio format that the computer can read (e.g. mp3).

**Finalizing**

Definitive conclusion of the process of writing to a CD/DVD. After this it is not possible to write to the CD/DVD anymore. However, a finalized rewritable disc can still be deleted. A disc is automatically finalized if it is burned using the disc-at-once method.

**Firmware**

The firmware in recorders functions as the operating system of the drive and contains instructions which determine how the drive reacts to commands from the PC. Generally the firmware in modern recorders can be updated, improving the support for discs from other manufacturers for instance.

**HD DVD**

**High Definition DVD.** A possible successor to the DVD with greater storage capacity. The format is recognized by the DVD Forum. The HD DVD was developed in response to high-definition video requirements. Single-layer discs can store data volumes of up to 15 GB. In HD DVD recorders blue-violet laser is used, which can write the data "more tightly" on the disc. This makes it possible to store large quantities of data.

**HFS CD**

File system used by Apple© Macintosh systems. This format is only suitable for Macintosh discs.

**Image File**

An individual file on the hard drive that contains an image of a complete disc. An image can be used if problems occur during the burn process or if there is no recorder connected to the PC. You will need free space on your hard drive to create an image.

**Index Position**

You can set index positions within an audio track. You can "jump" to these using a suitable CD player. Currently, only very few CD players can handle index positions.

**Table of Contents (T.O.C.)**

Indicates the content of each session. The table of contents is stored in the lead-in.

**Jitter Control**

Many CD-ROM drives cannot read an individual sector on an Audio CD, which means that small gaps may occur in the data stream. Audio correction synchronizes the data stream by overlapping the sectors and so gaps do not occur.

**Crossfade**

A crossfade is a merging between two audio tracks. The start of the new track begins softly, while the current track is still playing. The two tracks merge without a pause.

**Label**

Most CDs have an imprint or label. You can use different methods, such as screen printing for example, to apply a label to the CD.

**Lead-in**

The initial area of every session is known as the lead-in. This is where the “table of contents” for your disc and additional information concerning the CD is stored.

**Lead-out**

The final area in a session. This area is located at the end of the disc. If the disc has not yet been finalized, the reference to the next session is stored here.

**MP3**

MPEG-1 Audio Layer 3. Audio format often used to compress audio files to a fraction of their original size (ratio 1:10) without any loss of quality.

**MPEG**

**M**otion **P**icture **E**xperts **G**roup. Standard that was developed for videos compressed at a higher ratio (e.g. SVCD and VCD).

MPEG-1	This format which is a part of the MPEG compression family has the highest compression rate.
MPEG-2	There are only minor differences between MPEG-1 and MPEG-2. MPEG-2 works better with TV sets with interlacing and is a broadcasting standard.
MPEG-3	Standard for defining High Definition TV.
MPEG-4	This standard is the next generation of MPEG-2.

**NTSC**

Standard for video and television in the United States and Japan. NTSC has more frames per second than PAL, but has fewer horizontal lines.

**PAL**

Video and TV standard in Europe. PAL has more horizontal lines than NTSC, but has fewer frames per second.

**Photo-CD**

CD which is used for storing images, photos, slides, and other visual data. A photo CD generally consists of multisessions. The standard originates from Kodak and Philips.

**Plug-in**

Software used to add other features to a program (software) or to support troubleshooting.

**Buffer Underrun**

Buffer underruns are caused when there is an interruption to the flow of data to the internal buffer of the recorder. This can be the fault of the software or the hardware itself. When recording, data is fed continuously to the recorder's buffer in order to keep a steady flow of data which is required when recording. When something interrupts that steady flow, it can cause a buffer underrun and your disc is no longer useable.



Most modern recorders have a protective mechanism against buffer underruns.

## Red Book

This standard describes the CD-DA.

## Recorder

A recorder writes to discs. A recorder is commonly referred to as a "burner".

## SCSI

**S**mall **C**omputer **S**ystem **I**nterface. Bus system to which different terminal devices such as a SCSI hard drive, streamers or a CD recorder may be connected. At this time, SCSI is the only possibility of operating a CD recorder on a typically used computer system.

## Sector

Smallest addressable information unit on a CD. A sector is composed of 2,352 bytes of which - depending on the type of CD used - differing amounts are available as user data. A sector generally consists of a header, synchronization bits and user data. It may also have error recognition and correction data. A drive with a simple read speed of 1/75 seconds is required to read a sector.

## Session

Discs such as CDs and DVDs are divided into tracks and sessions. A session is a self-contained data area that is burned using a single process, and consists of a lead-in, one or more tracks, and a lead-out. In principle, a session is comparable to the partition on a hard drive. A multisession disc can contain multiple sessions.

## Simulation

Performs all steps in a burn process without using the laser beam. We recommend running a simulation if you are decompressing data before burning, e.g. when burning an Audio CD from MP3 files. You can assume that if simulation is successful, the burn process will also be successful.

## Track

Data unit that joins successive sectors on a disc. On an Audio CD a track corresponds to a piece of music. Several tracks together with the lead-in and lead-out build a session.

## Track-At-Once (TAO)

Writing method in which each track is written individually to the CD. The writing process is interrupted briefly after each track, i.e. the laser switches off. With this writing method, it is only possible to continue writing to a CD sometimes and at a later stage.

## Transcoding

Transcoding is the conversion from one audio format to another, e.g. WAV files to MP3 files.

## Volume Descriptor

Area at the beginning of a CD containing the structure of the file system. It may also contain additional and optional information about the CD (e.g. the name of the CD, the publisher, the copyright notice).

## **Yellow Book**

The Yellow Book is the standard for the format of CDs used for data storage.

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## 18 Tab Matrix

This matrix shows which tabs are available for which disc format in the **Compilation** window. The tabs are listed in the top row; the disc formats in the left-hand column.

An "x" entered in a cell within the table indicates that the tab is available for this disc format. A "-" in a cell indicates that the relevant tab is not available for this disc format. The "Extra" column lists specific additional tabs that apply to the respective disc format.

	Info	Multisession	ISO	UDF	Label	Date	Misc	Audio CD	Burn	Extra
CD/DVD-ROM (ISO)	x	x	x	-	x	x	x	-	x	-
Audio CD	x	-	-	-	-	-	-	x	x	-
Mixed Mode CD	x	-	x	-	x	x	x	x	x	-
CD EXTRA	-	-	x	-	x	x	x	x	x	-
miniDVD	x	-	x	-	x	x	x	-	x	-
CD/DVD-ROM (Boot)	x	-	x	-	x	x	x	-	x	Boot
CD/DVD/HD DVD-ROM/ Blu-ray Disc (UDF)	x	x	-	x	x	x	x	-	x	-
CD/DVD-ROM (UDF/ISO)	x	x	x	x	x	x	x	-	x	-
DVD-Video	x	-	x	-	x	x	x	-	x	-

## 19 Contact

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