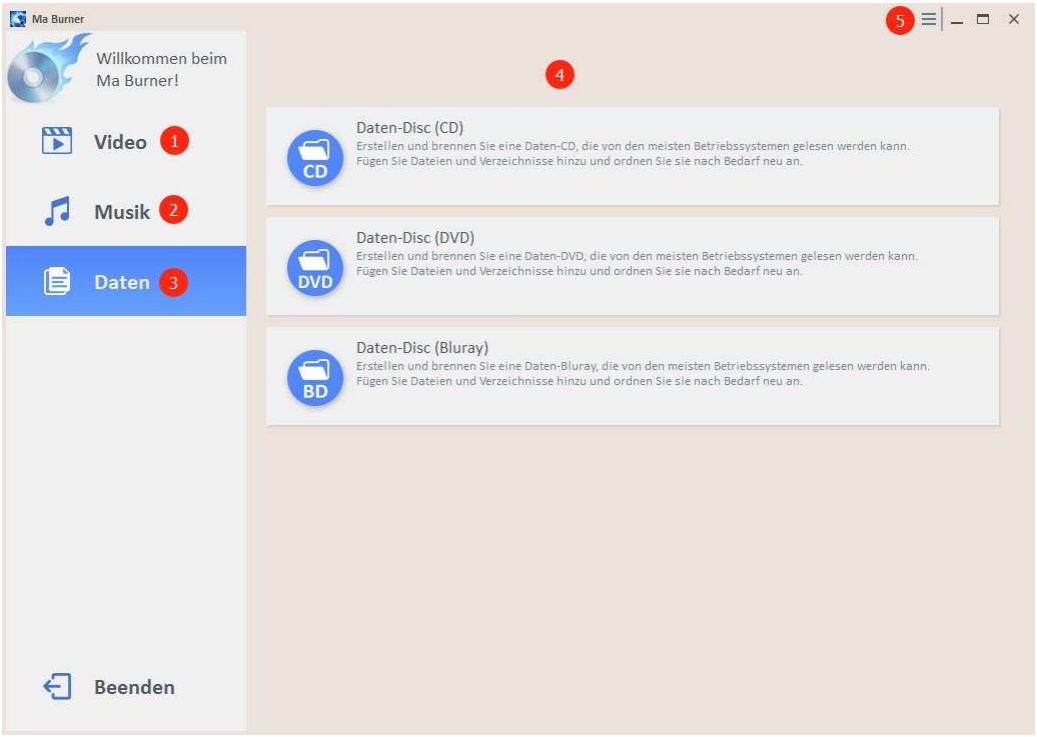
Manual – magnussoft® Burning Media 28

Thank you for choosing this program.

We have designed the product with an intuitive, clear, and well-structured interface for most use cases. In doing so, we have placed greater emphasis on the logical sequence of project creation. The following section describes the process in a clear and logical sequence of steps to make using this software as easy as possible for you.

Burner surface

After starting the program, you will be taken directly to the main menu.



Here you can select your desired medium (data carrier type).

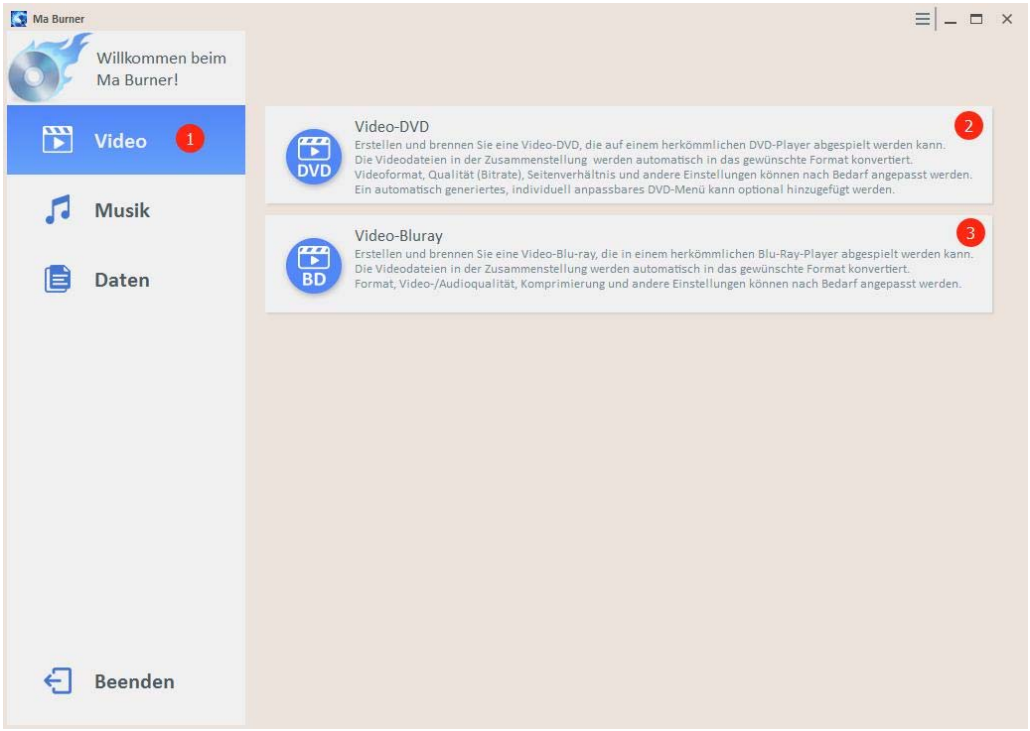
The following are available:

- Create video data storage devices **(1)**
- Create a music CD **(2)**
- Writing data to a data carrier **(3)**

Depending on the type of data carrier (CD-ROM, DVD, Blu-ray) available for this function, a corresponding selection is offered in the right-hand menu area **(4).**

Clicking on the menu button **(5)** takes you to further settings in the program (language and temporary paths).

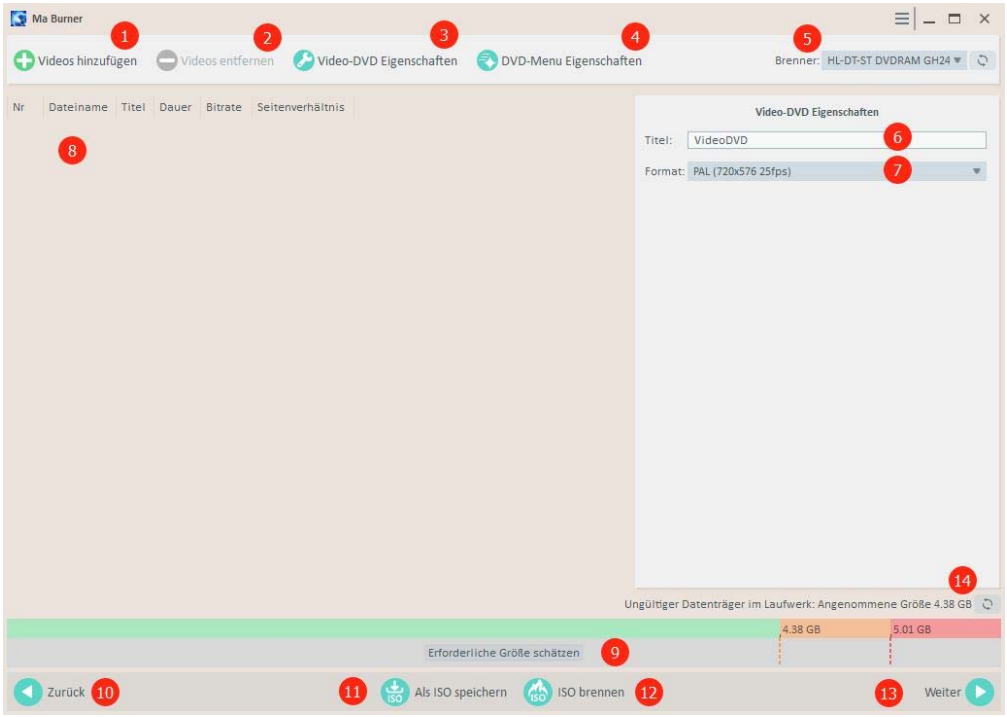
Creating a video data carrier (movie)



1. First, select “Video” **(1)** from the main menu on the left-hand side.

2. Now select the type of disc you are using: DVD **(2)** or Blu-ray **(3)**. The brief information provided in the button can be very helpful when making your selection.

After selecting the data carrier type (here DVD), you will be taken to the manager, which will help you compile the DVD content.



Clicking on “Add video” **(1)** takes you to the file manager, which allows you to select movies and add them to the project.

Alternatively, you can add movie files to the compilation at any time using drag and drop. To do this, drag the selected movie files from Windows File Explorer into the application in area **(8)**.

Movies included in the project are displayed in area **(8)** after they have been added.

If you want to remove a movie from the project, you can do so using button **(2)**.

To do this, select one or more movies and then remove them by clicking on button **(2)**.

Clicking on button **(3)** takes you to the DVD properties in the right-hand menu display. Here you can select the name of the data carrier **(6)** and the video format to be used **(7)**. Tip: PAL is the most commonly used video DVD format in Europe.

If you want to create a menu for a DVD compilation of several movies, use button **(4)**. This will take you to the DVD creation menu on the right-hand side of the menu. The use of this menu is explained separately in the section “Creating a DVD menu”.

To select the burner to be used, use the selection under **(5)**.

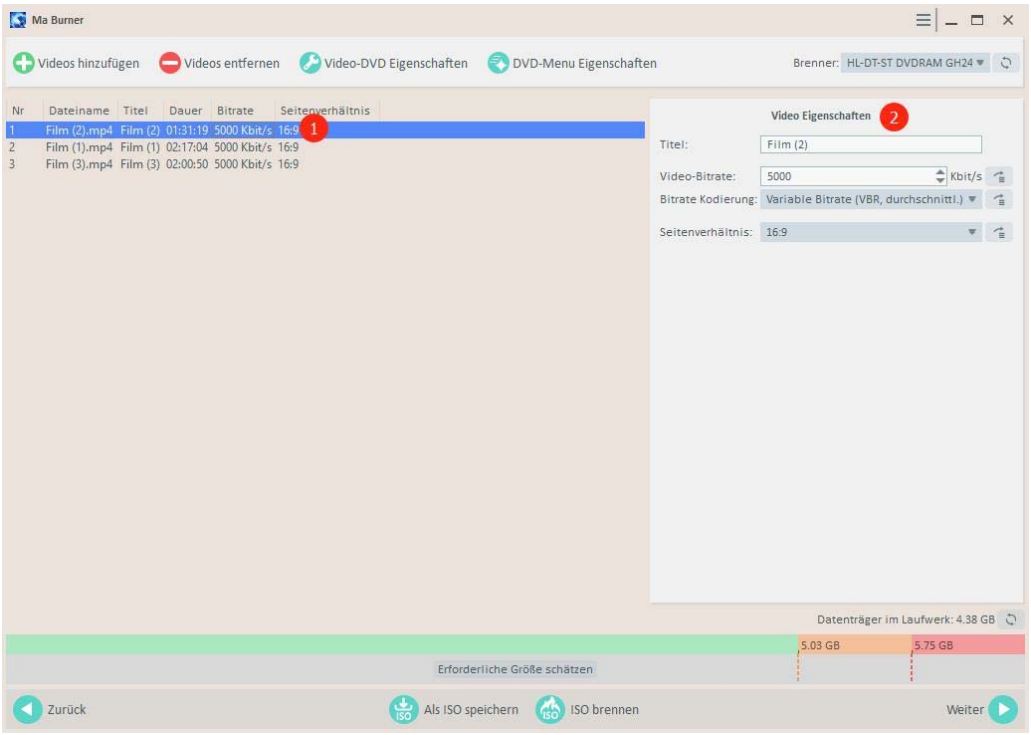
Area **(9)** displays the estimated amount of data on the data carrier. For further information, please refer to the section “Calculating the required storage space on the data carrier.”

Button **(10)** takes you back to the main menu.

Button **(11)** allows you to create an ISO image of the current compilation and save it as a file. Button **(12)** allows you to select an ISO file and burn it to a physical data carrier. Note: An ISO image is a file (usually with the extension *.iso) that contains an image or the contents of a CD, DVD, or similar optical data carrier.

Once all the files for the project have been compiled, their quality adjusted to meet requirements, and a DVD menu created (if necessary), click button **(13)** to proceed to the next step.

Individual settings for each movie



Once one or more movies **(1)** have been inserted into the existing project, separate settings **(2)** can be made for each movie.

The following settings are available:

(1) Title of the movie on the data carrier. (Note: This name is also used as the label for buttons in the DVD menu, if one is created.)

(2) Video bit rate at which this movie is to be encoded. This value can be used to adjust the quality of the video. Lower values reduce the video quality, but ensure that less storage space is used on the disc.

(3) The type of bitrate encoding. (Variable or constant bitrate, see details in Appendix A)

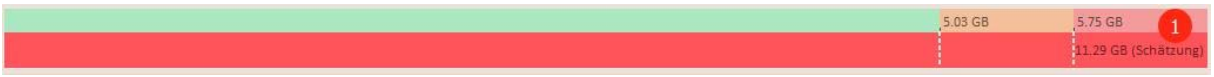
(4) The aspect ratio in which the movie is to be created. The movie is automatically adjusted or converted to the selected ratio. Only 16:9 or 4:3 are possible on DVDs. When adding a movie, this value is set to the aspect ratio that is closest to the movie.

You can change the order in which the movies are stored on the data carrier at any time. To do this, select a file with the mouse pointer, press the left mouse button, hold it down, and drag the movie to the desired position. After releasing the mouse button, the movie will be repositioned.

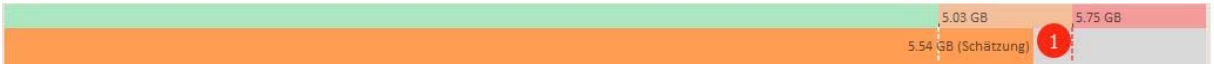
Calculate required storage space on the data carrier

Due to the complexity involved in converting films to DVD format, it is not possible to calculate the exact amount of storage space required on the data carrier. However, you can still calculate an estimate of the amount of storage space required.

To do this, select the “Estimate required size” button **(1)** and wait for the calculation to complete. The result of the estimate depends on the selected settings for the movies in the compilation and must be recalculated as soon as you change these settings.



If the film quality you have selected is too high and the amount of data does not fit on the desired data carrier, this will be indicated as shown in image **(1)**.



You can reduce the space required by reducing the quality of individual or all movies to an appropriate level. **(1)**

Adjust film size

To adjust the size of the movies, the quality of the movie to be burned can be reduced if necessary. This can result in significantly smaller data volumes with only a slight loss of quality.

The default setting shown below produces medium or standard quality for individual movies. This results in relatively large data volumes.

To improve quality, the “Video Bitrate” **(1)** values can be increased and the “Variable Bitrate (VBR average)” setting should be used for “Bitrate Encoding” **(2)**.

To minimize the amount of data, the values for “Video Bitrate” **(1)** can be reduced and the setting “Variable Bitrate (VBR maximum)” should definitely be used for “Bitrate Encoding” **(2)**.

For an explanation, see Appendix A.

Individual settings can easily be applied to all movies in the project. To do this, click on the button **(3)** behind the respective setting.

If reducing the quality does not produce the desired result, the number of movies in the compilation may need to be reduced.

Creating a DVD menu

If you want to create a custom menu for the movies on the disc, the program offers an easy-to-use menu editor.

To do this, click on the “DVD Menu Properties” button **(1)**.

You can now configure your desired settings in the menu on the right.

First, select that you want to create a DVD menu **(1)**.

Next, select the page format for the desired menu **(2)**.

If you do not want to create a main menu for the individual movie sections, check the box at **(3)**.

If you want to return to the menu after finishing a movie, check the box at **(4)**.

If you want to number the movie buttons, check the box at **(5)**.

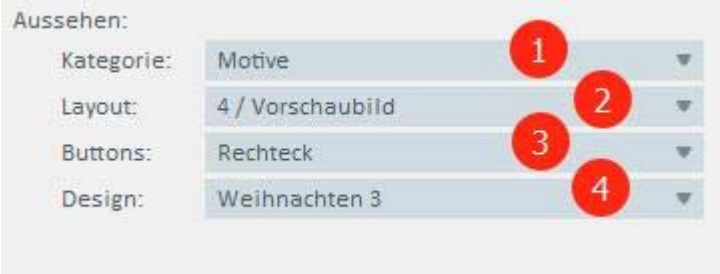
If you want to use your own (cover) image in the main menu, check the box at **(6)** and select an image file in the file manager.

You can see a preview of the current menu settings at **(1)**.

You can enlarge the preview using the button **(2).**

You can switch the preview to the main or submenu pages using the button **(3)**.

You can refresh the preview using the button **(4)**.



There are various options available for designing the menu backgrounds.

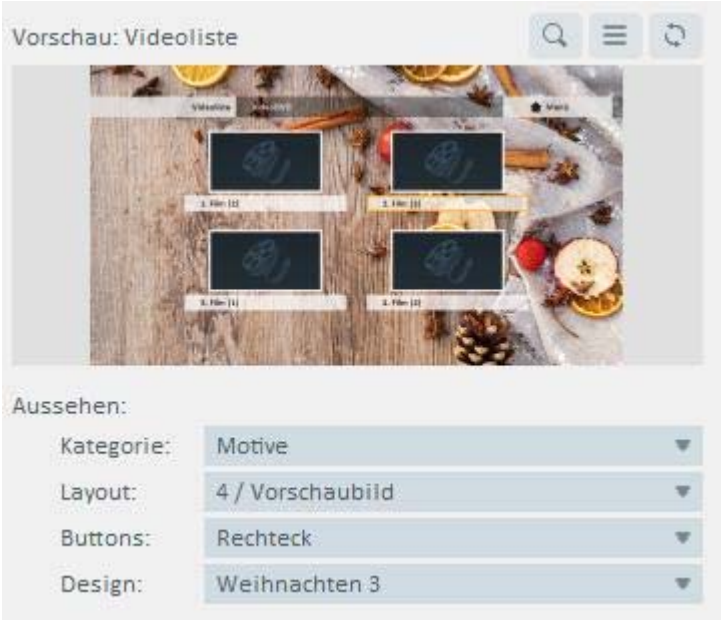
Under Category **(1)**, you can choose between plain or motif backgrounds.

Under Layout **(2)**, you can change the arrangement of the menu buttons and set whether a preview image should be shown for each video.

In the Button **(3)** section, you will find an extensive selection of button shapes.

The Design section **(4)** offers a selection of backgrounds and color schemes. If you have selected the motif category, backgrounds for specific occasions are available here.

Once you have made all your desired settings, you can view the result under Preview.



ISO-files

If you do not want to burn to a data carrier, but only want to create an ISO file (disc image), please use the “Save as ISO” button **(1)**. If you want to burn a previously created ISO file to a data carrier, you can load the ISO file using the “Burn ISO” button **(2)** and then burn it to a medium.

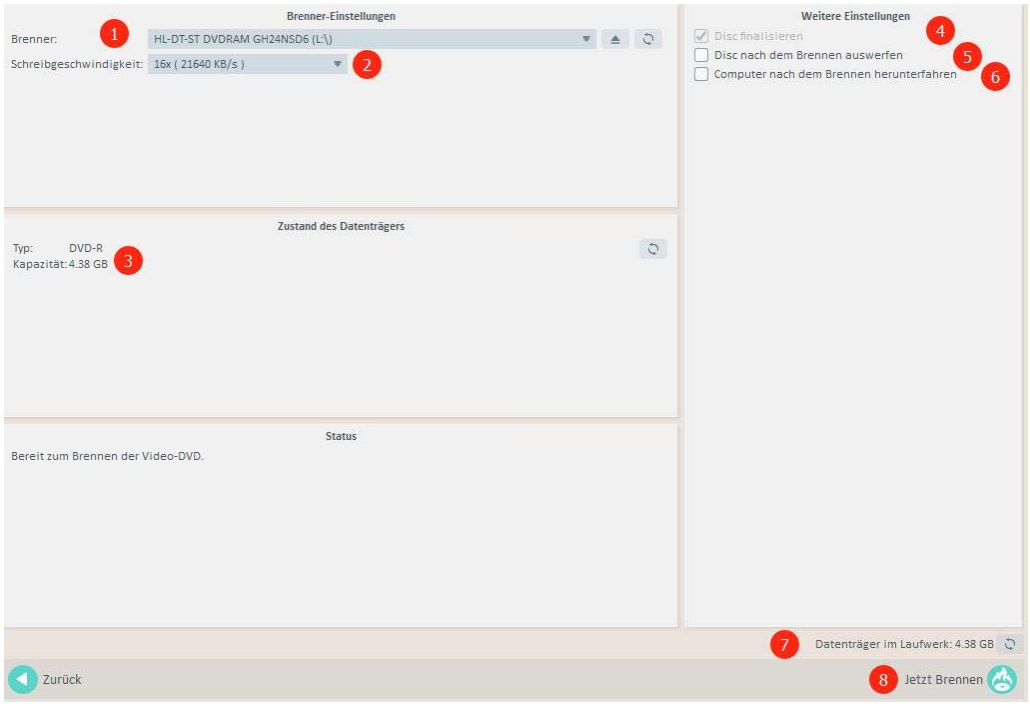
If everything is as desired, click “Next” to proceed to the burning settings.

Save current project

If you want to save a current project so that the settings are available again for another/later project, you can use the “Save compilation” menu item **(2)** under “Compilation.” If you want to reuse this project backup at a later date, you can do so using the “Load compilation” menu item **(1)**.

Please note that the selected data carrier type must correspond to the one stored in the project.entspricht.

Settings for burning a DVD



Under “Burner” **(1)**, you can select the burner to be used.

The “Write Speed” supported by the burner on the selected medium can be set here **(2)**.

Information about the inserted medium is displayed at position **(3)**.

If you check the box next to “Finalize disc” **(4)**, the medium will be finalized and you will no longer be able to create a multisession disc. For video and audio media, the disc is finalized by default; only for data discs do you have a choice.

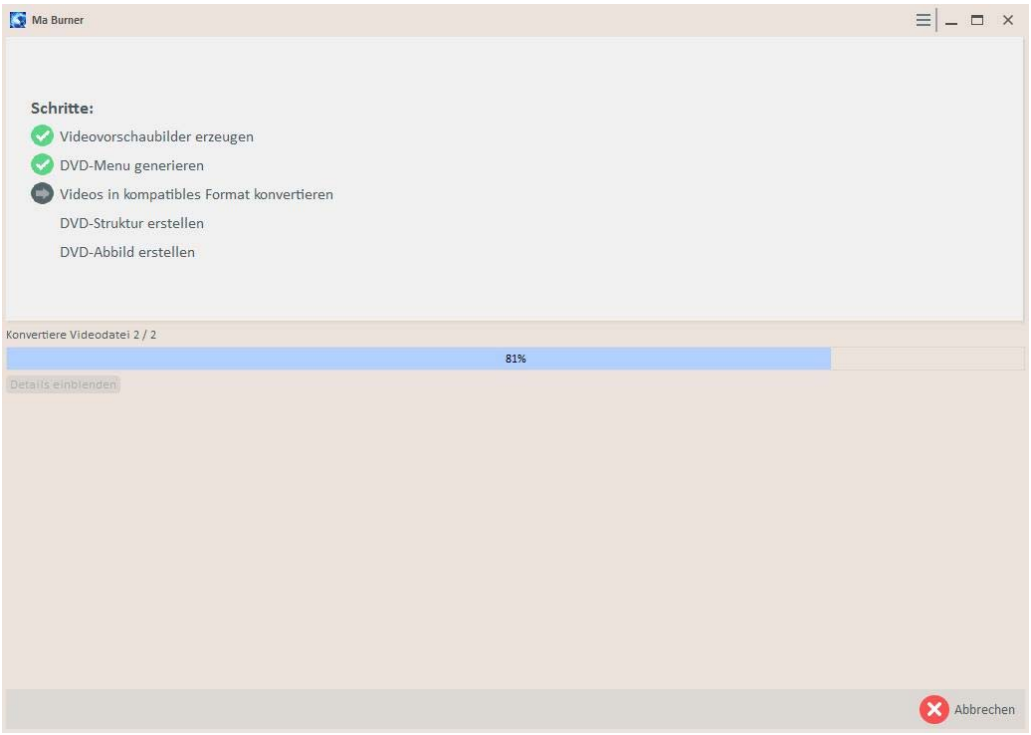
If you want the disc to be ejected from the drive after completion, check the box at **(5)**.

If you want the computer to shut down after burning, check the box at **(6)**.

(7) displays the disc in the selected drive.

Once all settings have been made, click the “Next” button **(8)** to start burning.

Preparing the firing process

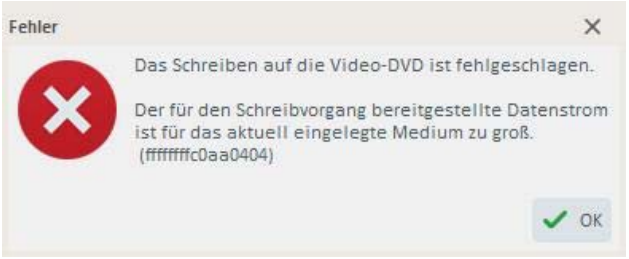


During preparation for the burning process, all data for the burning process is adjusted.

The progress bar shows the successful completion of each step.

If problematic data volumes arise after preparation, you will be notified before the

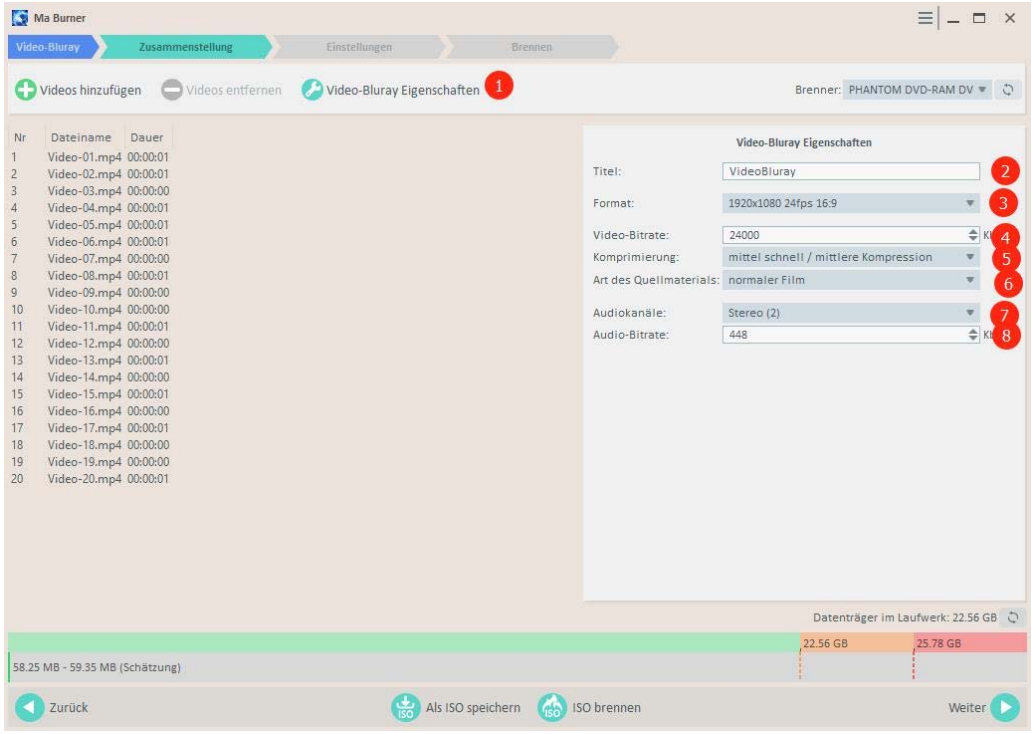
Burning process pointed out.



If you ignore this warning, burning may be possible without any problems, or it may be interrupted if there is insufficient storage space, i.e., if the amount of data is too large.

After successful burning, you can exit the project or create a new one.

Create Blu-ray video discs



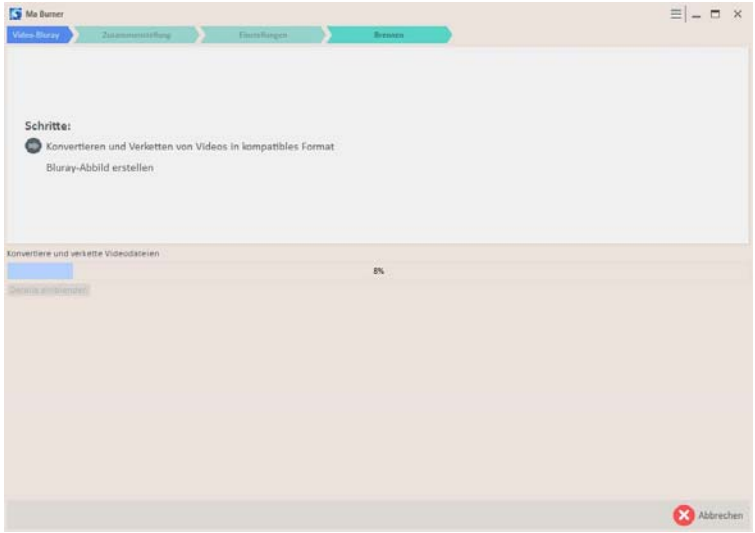
Once movies have been added to the existing project, the corresponding Blu-ray settings **(1)** can be applied globally to all movies.

The settings affect the name **(1)** of the data carrier, the format of the movies (resolution/FPS/aspect ratio) **(2)**, the video bitrate (quality) **(3)** in which the movies are encoded, the compression type and quality **(4)**, a preset for the original material for better encoding **(5)**, the audio format to be used **(6)**, and the corresponding audio bitrate **(7)**.

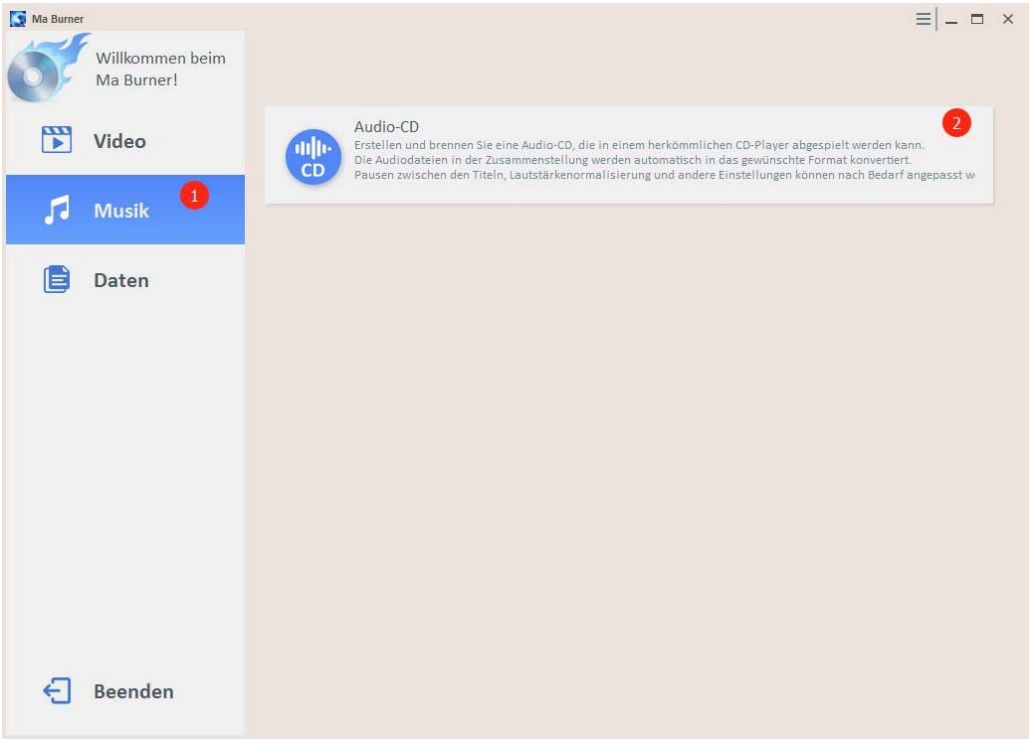
After clicking “Next,” you will be taken to the next step.

This is identical to the menu item “Settings for burning a DVD.”

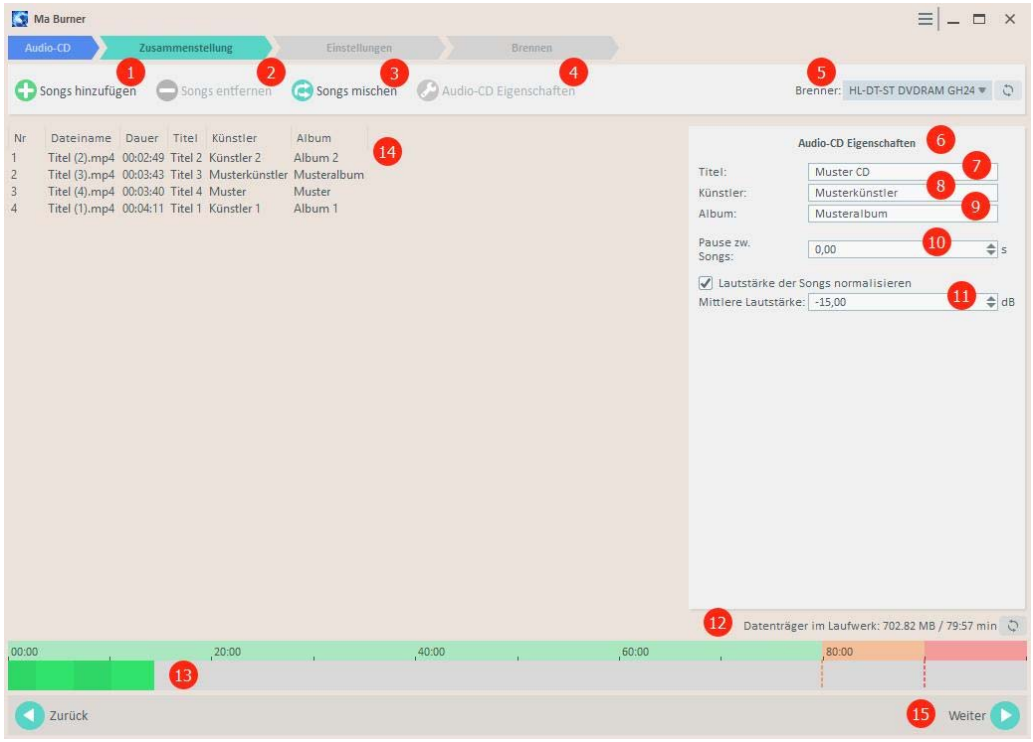
After successful burning, you can exit the project via “Back” or edit it again.



Creating a music CD-ROM



1. First, select “Music” **(1)** from the main menu on the left.
2. Now select Audio CD **(2)** on the right.



Clicking on “Add Songs” **(1)** takes you to the file manager, which allows you to select songs and add them to the project.

Alternatively, you can add song data to the compilation at any time using drag and drop. To do this, drag the selected song files from Windows File Explorer into the application in area **(14)**.

The songs added to the project are displayed in area **(14)**. (The properties of a song are described in the section “Settings for each song”.)

If you want to remove a song from the project, you can do so using the button **(2)**.

If you want to shuffle the order of the songs on the disc, you can do so using the “Shuffle songs” button **(3)**.

Clicking on Audio Properties **(4)** takes you to the properties of the music CD **(6)** in the right-hand menu display. Here you can change the name of the data carrier **(7)** and both the name of the album **(9)** and the name of the artist **(8)**.

The selection under **(5)** is available for selecting the burner to be used.

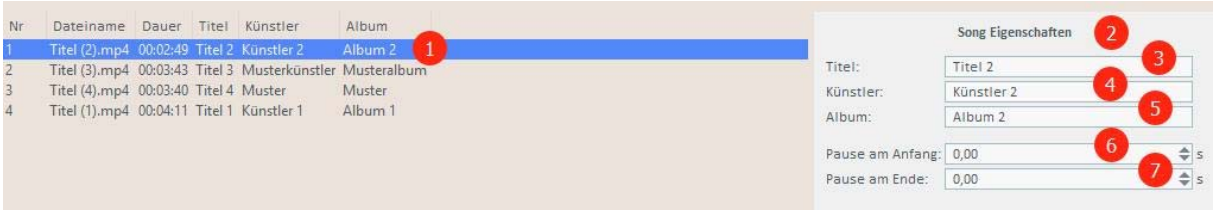
The button **(10)** can be used to set a desired pause between songs.

The button **(11)** allows you to adjust the volume of the individual songs in relation to each other.

The estimated amount of data on the disc is displayed in the area **(13)**.

The button **(15)** takes you to the next step.

Adjustment options for each song

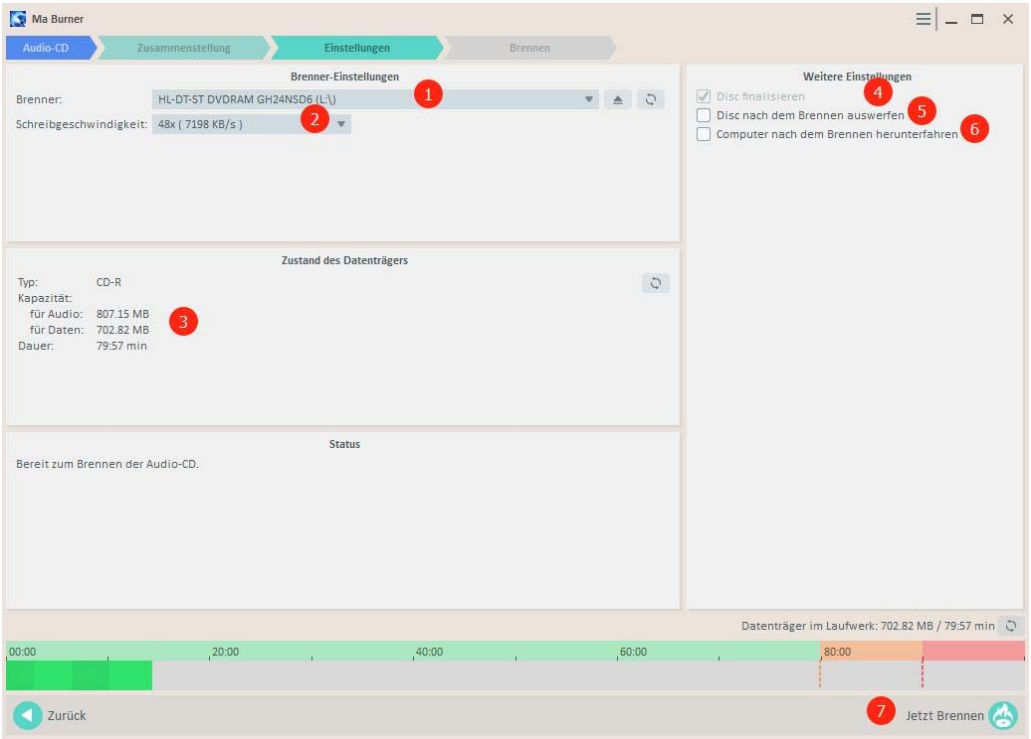


When you select a song **(1)**, you will be taken to the individual song settings **(2)** in the right-hand menu.

Here you can change the name of the song **(3)**, the name of the artist **(4)**, and the name of the album **(5)** if necessary.

You also have the option of inserting a pause before **(6)** or after **(7)** the song.

Once you have finished making all the settings, click on the “Next” button to proceed to the next step.



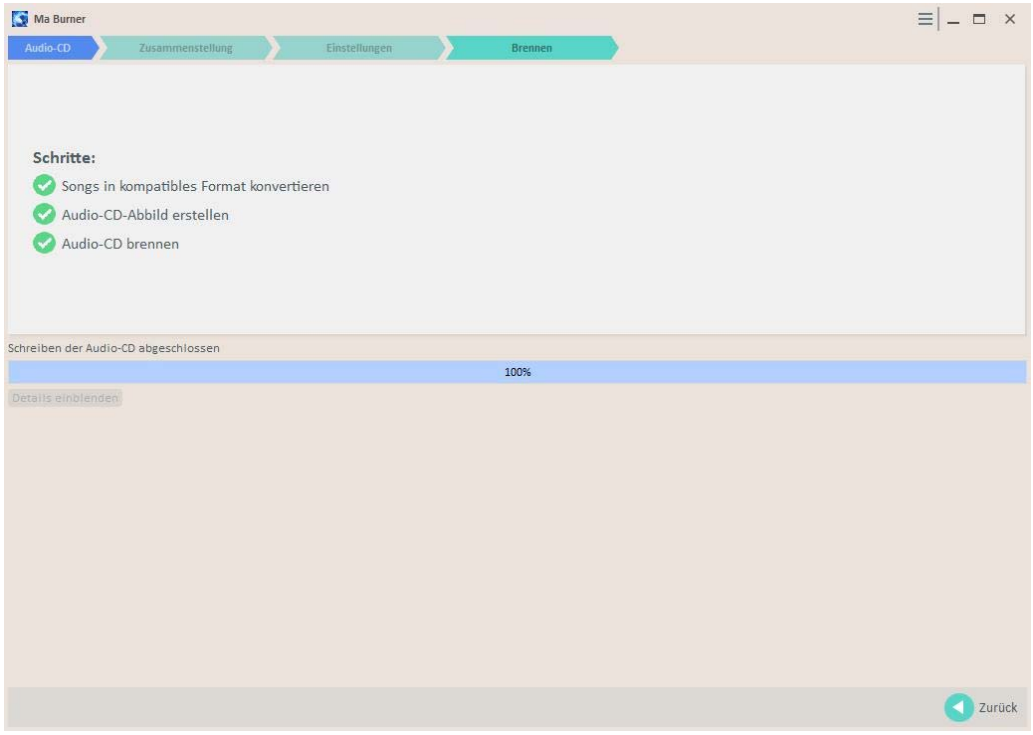
Here, you can select the desired burner under **(1)** and set the writing speed under **(2).**

Information about the inserted data carrier can be found under **(3)**.

Checking the box under **(4)** finalizes the CD, while checking the box under **(5)** ejects the CD from the drive after successful burning.

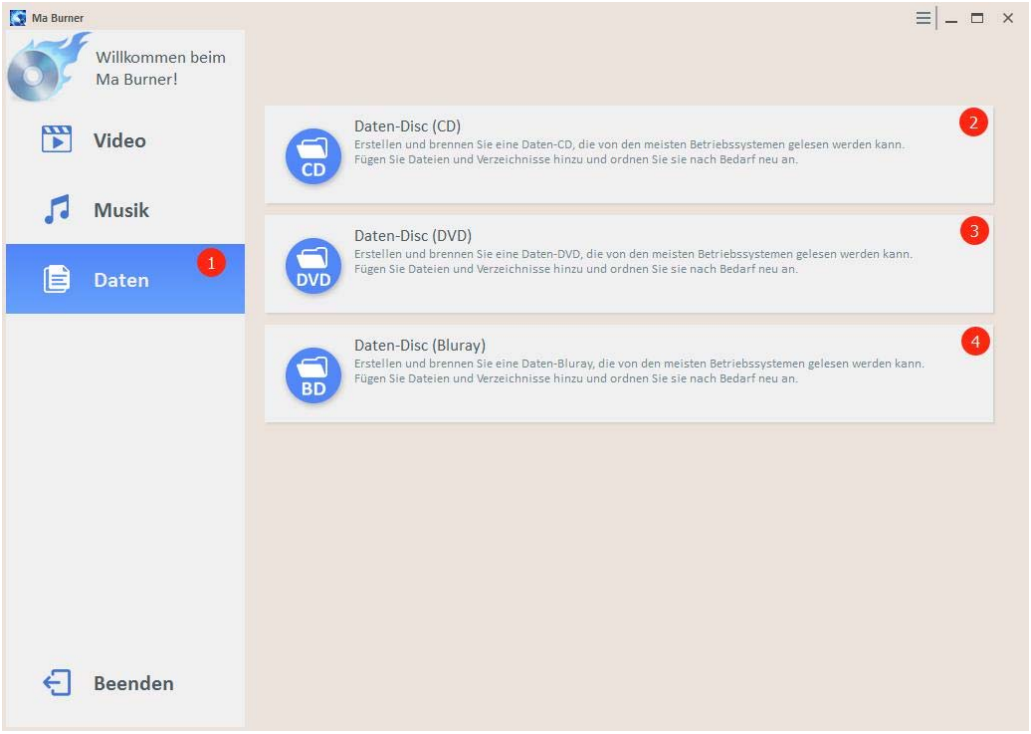
If desired, checking the box under **(6)** causes the computer to shut down after successful burning.

Start the burning process by clicking on “Burn now” **(7)**.



After a successful burning process, you can edit the project using “Back” or return to the main menu.

Creating a data CD-ROM / DVD / Bluray

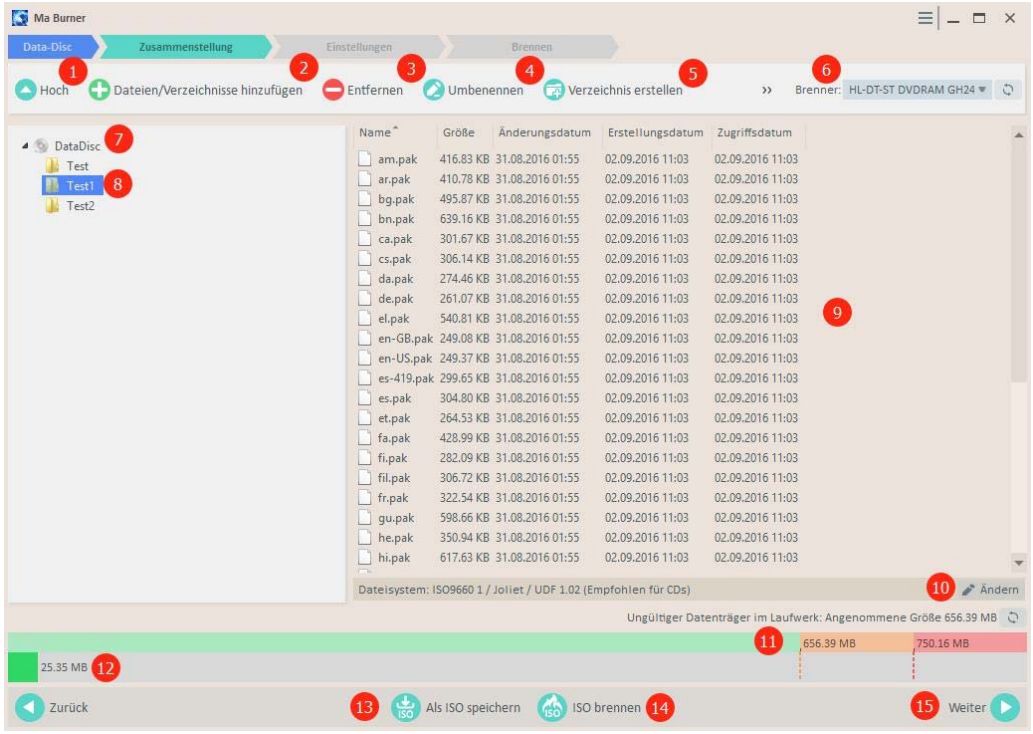


First, select “Data” **(1)** from the main menu on the left-hand side.

Now select the type of data carrier you are using: CD-ROM **(2)**, DVD **(3)**, or Bluray **(4)**.

Brief information in the button will help you make your selection.

File manager



The file manager is responsible for compiling the data to be transferred to the project.

In the folder structure of the data compilation, you can jump to the parent directory using the “Up” **(1)** button.

Data and folders can be added to the project using the button **(2)**. This can also be done conveniently using drag and drop. You can remove a file/folder from the compilation using the button **(3)**. Renaming is possible using the button **(4)**. New directories can be created using **(5)**.

You can specify the burner to be used via the setting under **(6)**.

You can change the name of the compilation directly by double-clicking on **(7)**.

In the left-hand area **(8)**, all existing folders in the compilation are displayed in a tree view. The currently selected folder is highlighted in blue and the contents of this folder are shown in the right-hand area **(9)**.

The selected file system for the project is shown under **(10)** and can be customized by clicking on the pencil icon. (See the section “File system of the project” for more information.)

The normal storage capacity of the selected data carrier can be found under **(11)**.

The actual, current data usage of the project is shown under **(12)**.

ISO files can be created or burned under **(13)** and **(14)**. (More on this in the section “ISO files” later.)

Click on “Next” **(15)** to proceed to the next step.

File system of the project

In this menu, you can specify and configure the file system used for the disc to be burned. The default setting is always the file system that is suitable for the disc.

Use the “Defaults” menu item **(1)** to select from various presets of file systems for specific discs.

If you want to customize the settings, you can do so using the options under **(2), (3)**, and **(4)**.

For stricter compliance with file system regulations, the check mark under **(5)** must be set.

You can read about the resulting limitations for the file system under **(6)**.

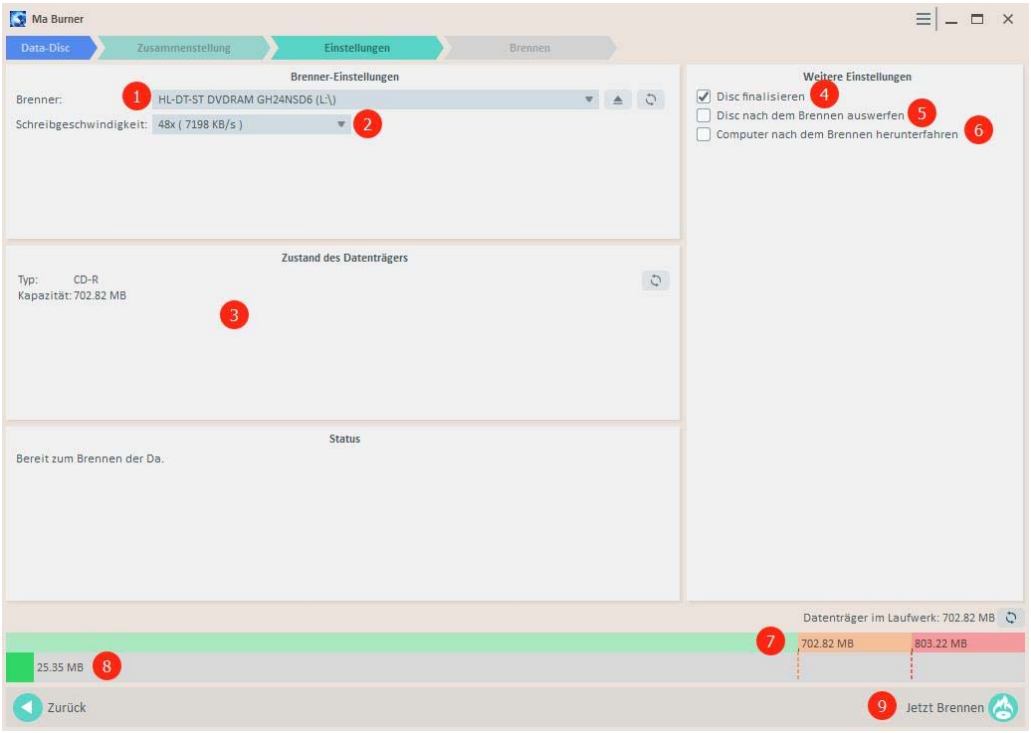
Click on “Apply” **(7)** to close the selection window and apply the settings.

ISO-files

If you do not want to burn to a data carrier, but only want to create an ISO file (disc image), please use the “Save as ISO” button **(1)**. If you want to burn a previously created ISO file to a data carrier, you can select the ISO file using the “Burn ISO” button **(2)** and then burn it to a medium.

Once all settings have been made, click “Next” to proceed to the next step.

Settings for burning a data disc



Here, you can select the desired burner under **(1)** and set the writing speed under **(2).**

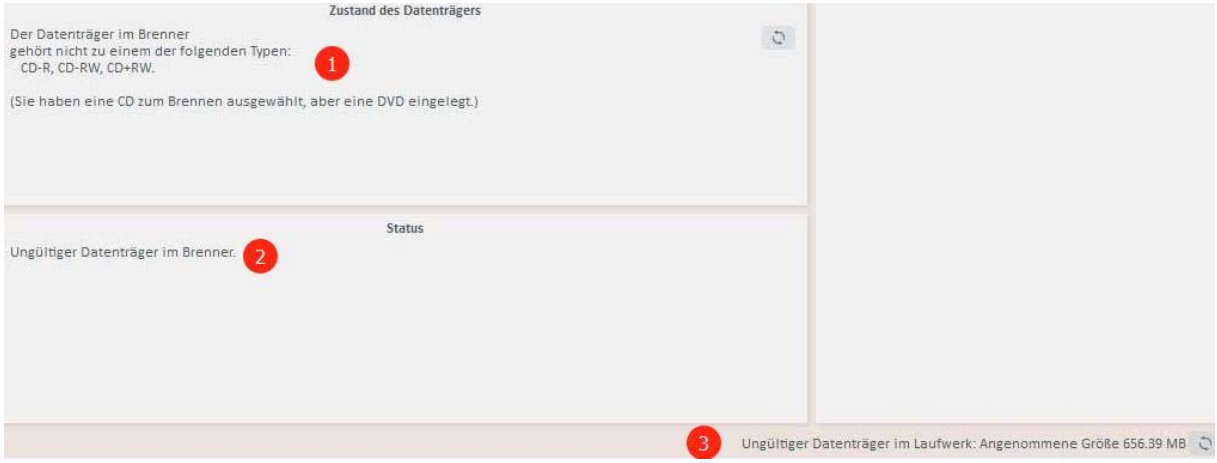
Information about the inserted data carrier can be found under **(3).**

A check mark under **(4)** closes the data disc and thus prevents further data from being burned onto it. (Multisession disc no longer possible.) A check mark under **(5)** ensures that the burner tray opens after successful burning.

If desired, a check mark under **(6)** causes the computer to shut down after burning.

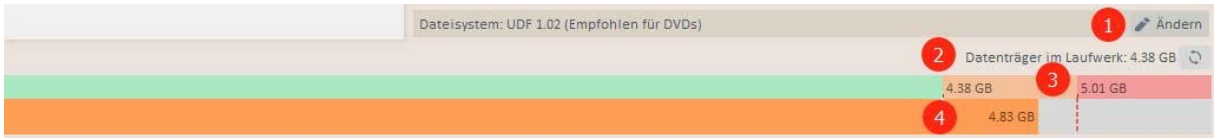
The maximum capacity of the selected data carrier can be found under **(7),** and the data size currently used by the project under **(8).**

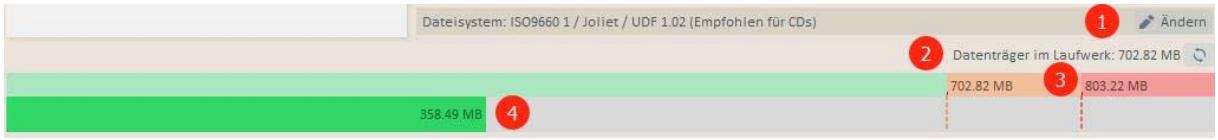
Start the burning process by clicking on “Burn now” **(9).**

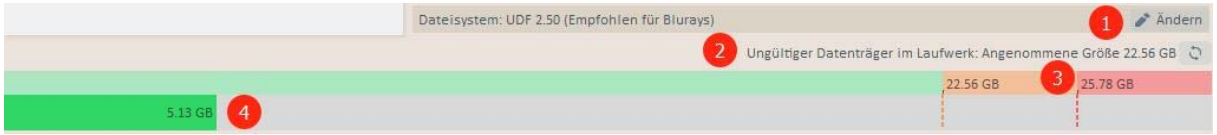


If you have specified a medium for your project that is not compatible with the inserted data carrier, the program will display this error and prevent an incorrect burning process.

Display of media inserted for the project and capacity information







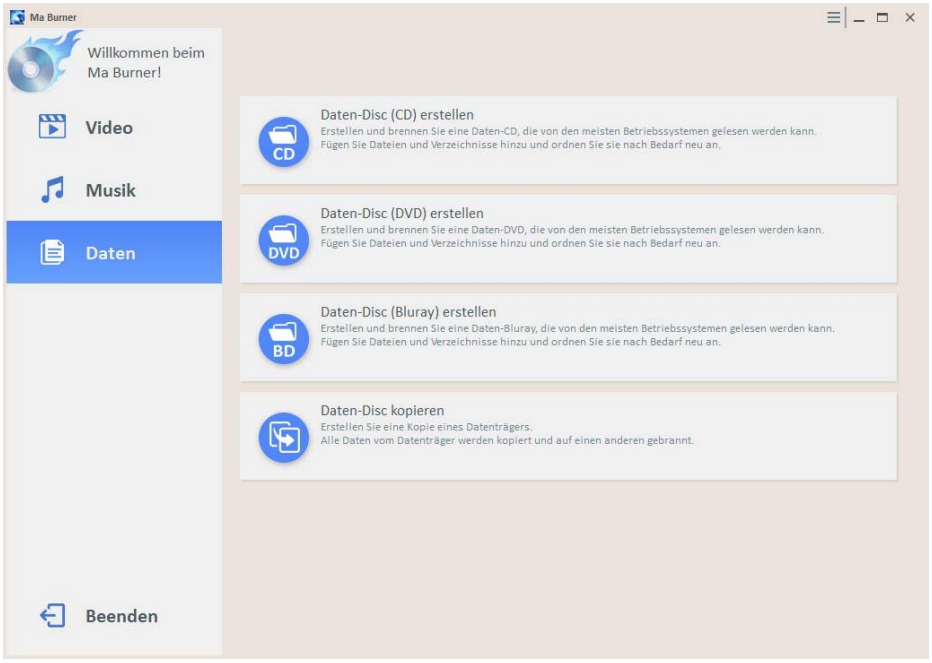
Depending on which medium has been inserted into the burner and which project is being used (CD-ROM, DVD, Blu-ray), the desired disc format can be adjusted under **(1)**.

The disc currently in the drive is displayed under **(2).**

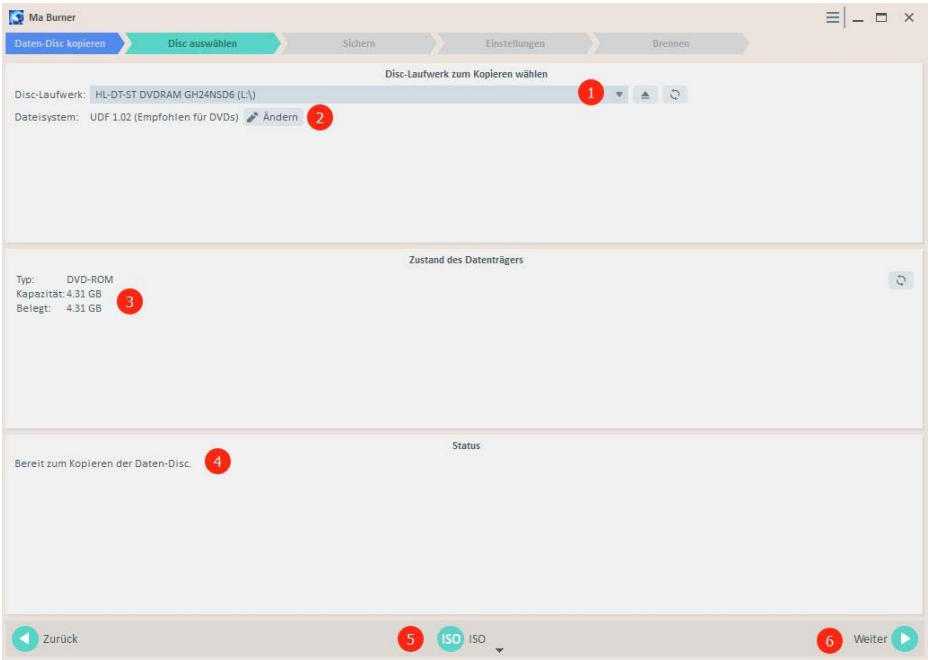
The available capacity on this data carrier (**LIGHT GREEN = NORMAL / LIGHT ORANGE = MAY STILL BE POSSIBLE / RED = DATA VOLUME IS TOO LARGE**) is displayed under **(3).**

The storage space currently required by the project's data volume **(4)** is displayed in **DARK GREEN**.

Copy data carrier



To copy a simple data disc, select the “Data” menu item in the main menu and then the “Copy Data Disc” submenu item.



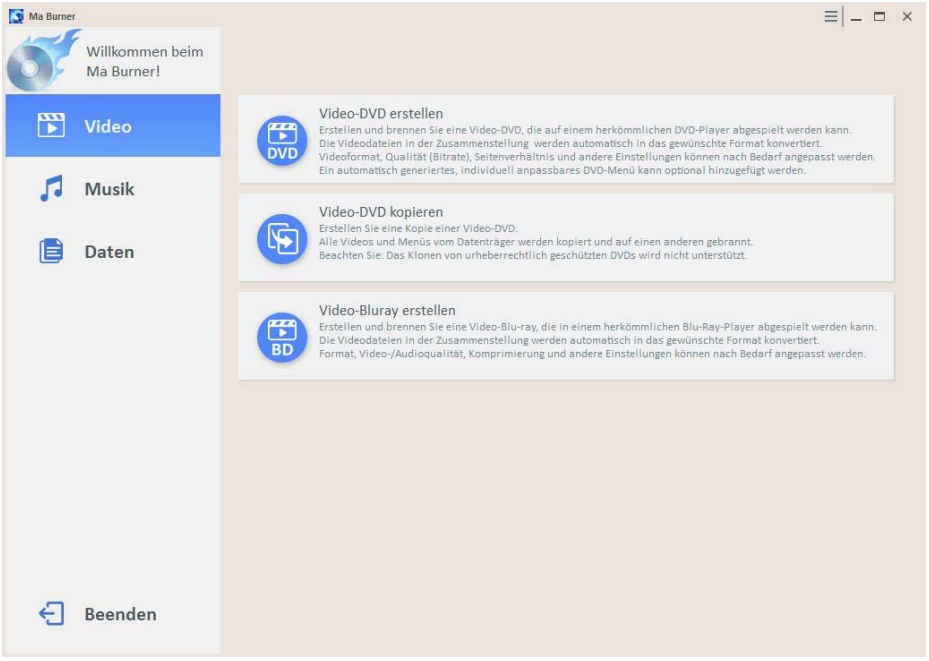
In the next step, you can select the drive to be used for the copy process under **(1).** You can also adjust the file system to be used (if necessary) under **(2).** The current data on the disc in the selected drive is displayed under (3). Information about the current job is displayed under **(4).** If you want to save the copy to an ISO file instead of another disc, you can do so using the button **(5),** then continue with the button **(6).**

In the “Backup” step, the inserted data carrier is first copied or temporarily stored. In the ‘Settings’ step, you then select the burner, speed, and other settings as usual (see section "Settings for burning a data-*Disc*“).

Now insert a new data carrier into your drive, onto which the backed-up content can now be copied or burned. In the “Burn” step, the actual burning process to the new medium takes place.

Note: It is not absolutely necessary to use the same type of data carrier for burning. For example, a CD can be copied to a DVD, or a DVD to a Blu-ray disc, as long as there is enough storage space available.

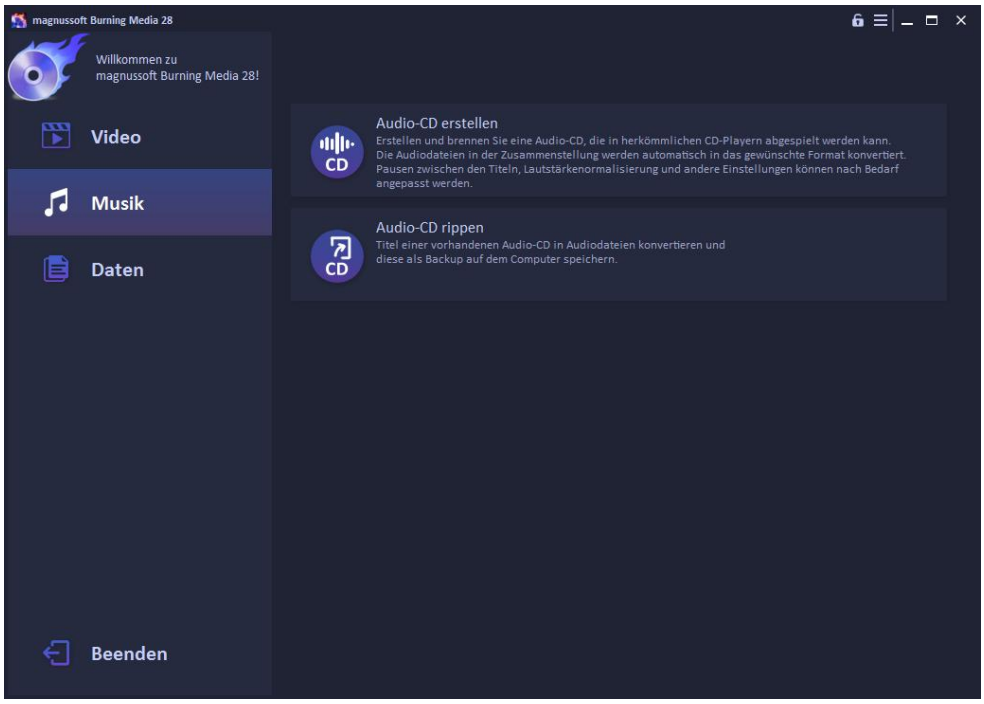
Copy video DVD



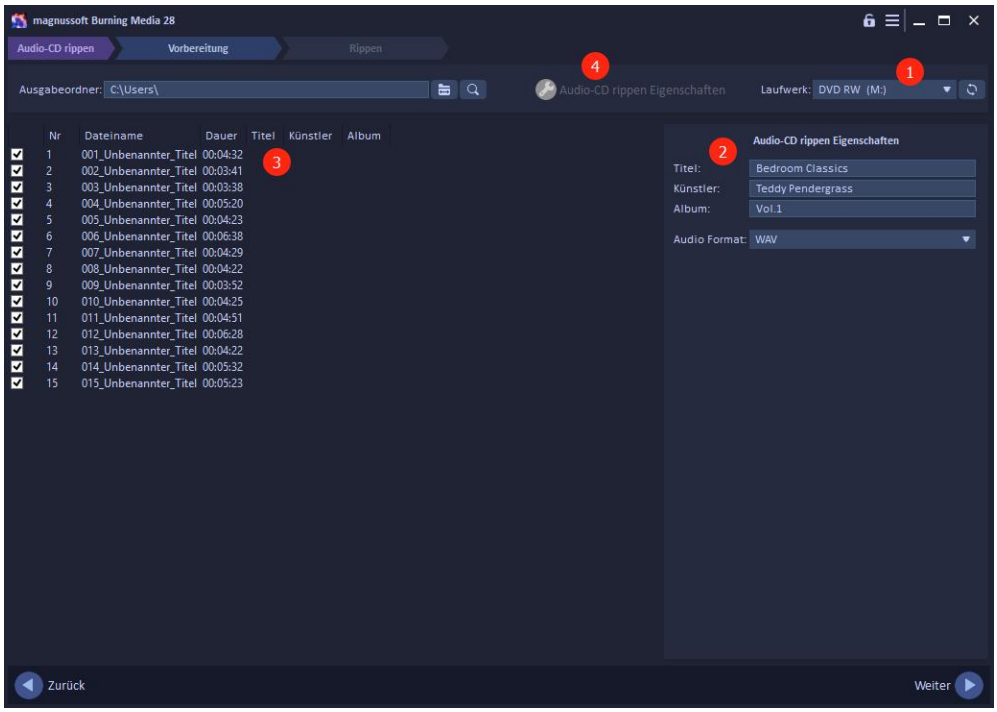
To copy a video DVD, select the “Video” menu item in the main menu and then the “Copy video DVD” submenu.

The rest of the process is exactly as described in the section “Copying data discs.” The only exception is that the file system cannot be changed and the disc can only be copied from DVD to DVD.

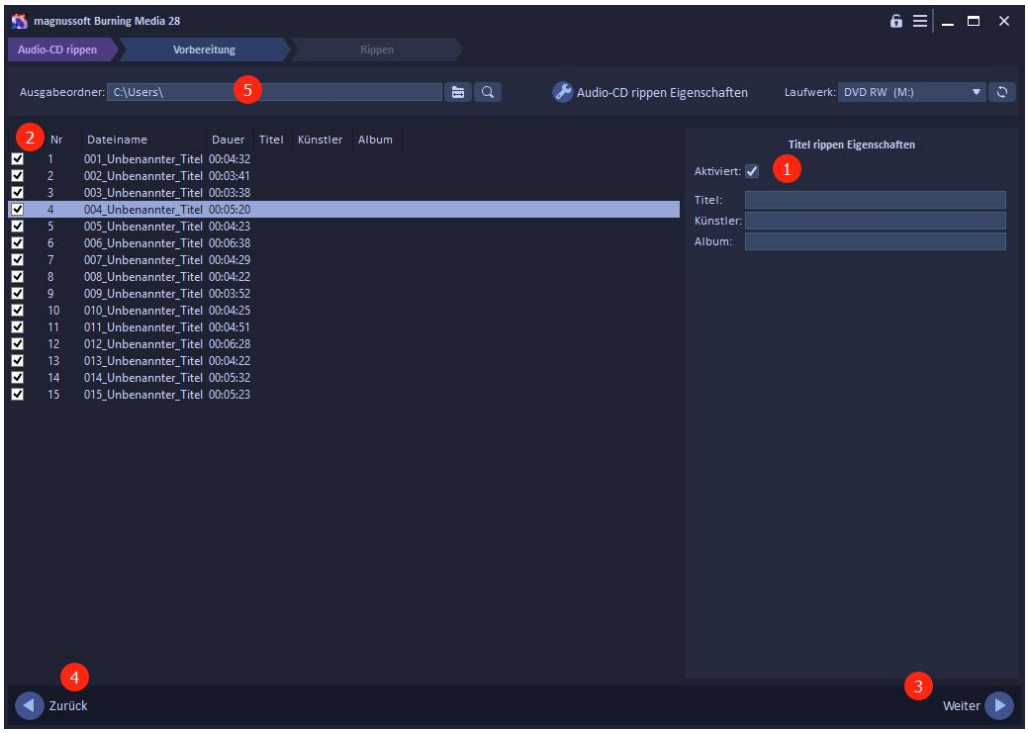
Ripping Music CDs



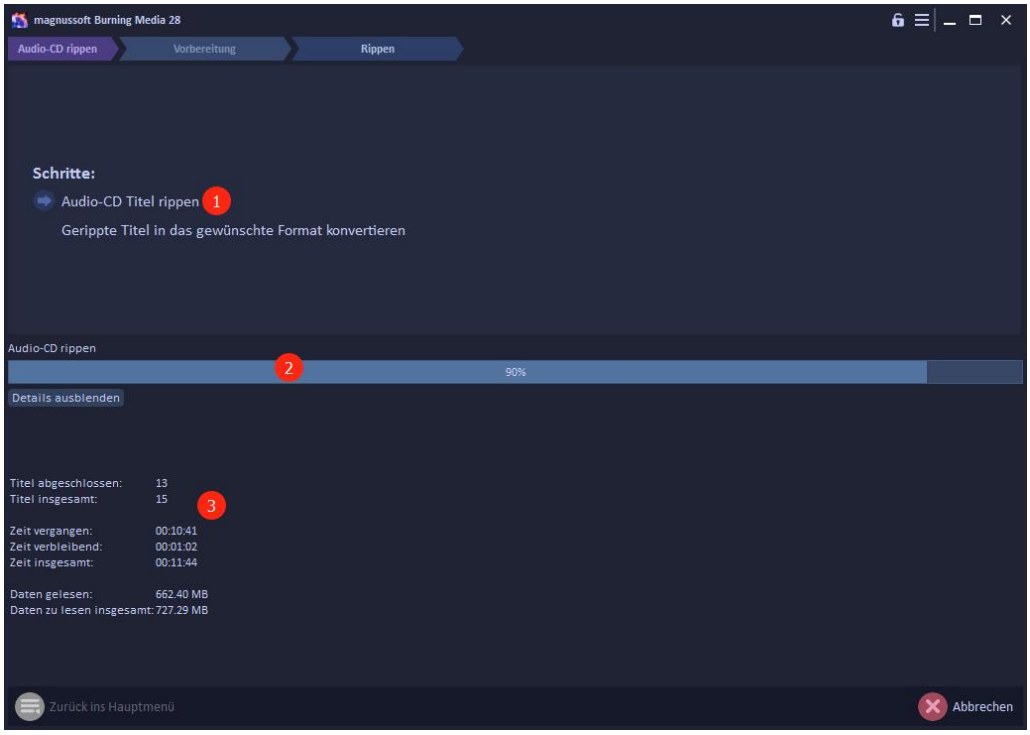
To rip a music CD, select the “Music” menu item in the main menu and then choose the “Rip Audio CD” submenu.



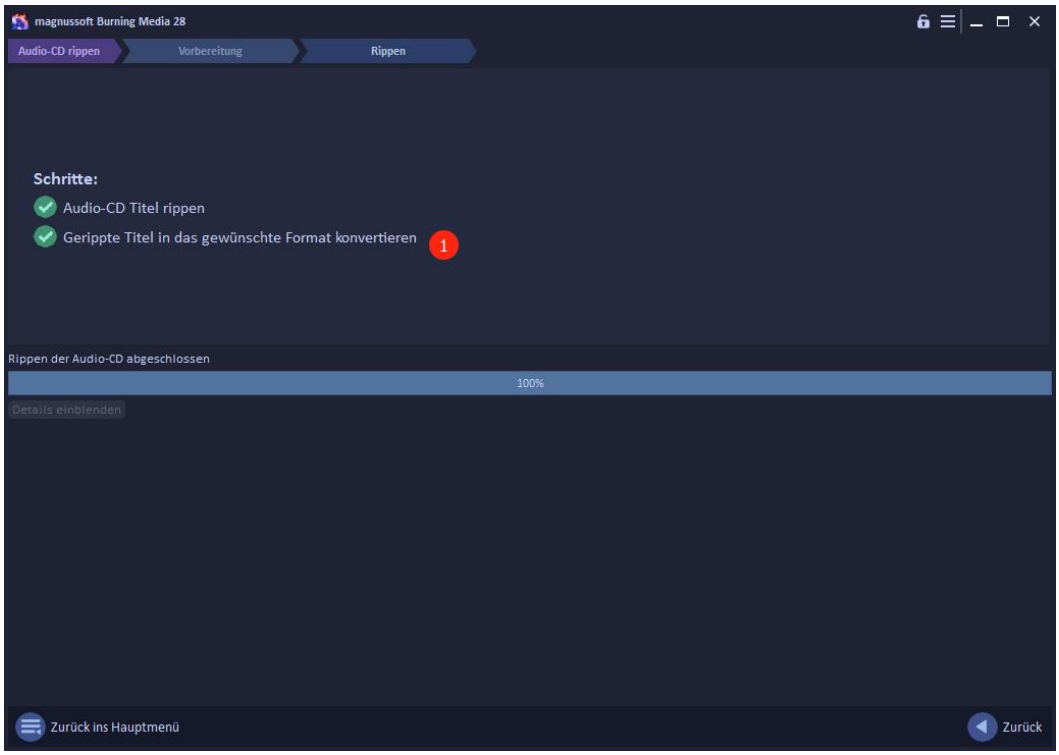
After selecting the drive containing the music CD (1), the program reads and displays the individual tracks (3). If the disc contains information about the track and artist, this information is imported (3) (2). You can add or edit information about individual tracks using the menu option under (4).



In this menu, you can exclude or include any track from processing under (2). You can specify individual settings for each track under (1). The output directory for the processed tracks can be adjusted under (5). Clicking the buttons (3) or (4) takes you to the next step or back to the previous menu, respectively.



The current processing status (1) is displayed both as a percentage (2) and in detail (3) during processing.



Once all steps have been completed, a message confirming successful completion will be displayed.

Important note

Bit rate encoding

VBR (variable bit rate, average):

Each individual frame of a video is encoded with a different or variable bit rate. A certain target bit rate is aimed for, and the bit rate of an image can sometimes be above and sometimes below the target rate. On average, the entire film then has a bit rate corresponding to the target bit rate. Variable encoding allows for better adaptation to different situations and the complexity of each individual frame, generally resulting in better video quality. The size of the encoded movie depends on the video material; “action-packed” footage (lots of scene changes, lots of image content) generates larger files compared to “quiet” material. This mode is recommended as the default because it achieves the best results.

VBR (variable bit rate, maximum):

All descriptions of VBR (average) also apply here. The only difference is that the target bit rate is considered the maximum here. This means that individual frame bit rates must not exceed the target bit rate. With this encoding type, you may be able to create smaller encoded video files and thus use less space on the data carrier.

CBR (constant bit rate):

Each frame of the video is encoded with the same constant bit rate. The size of the encoded film is then no longer dependent on the video material, but only on the constant target bit rate. Depending on the material and film situation, the quality of the video may suffer in certain places.

In general, for all encoding types, the higher or lower the target bit rate selected, the better or worse the quality of the video will be.