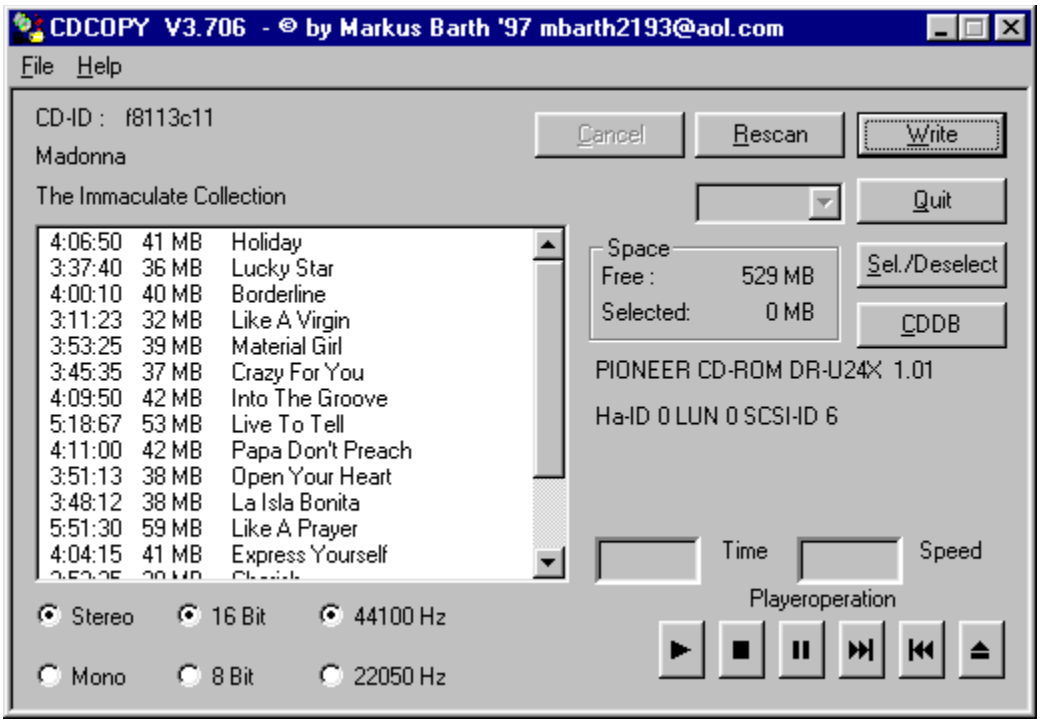
Introduction

CDCOPY is a tool to copy CDDA (audio-tracks) from CDROM/CDR to disk. It is not able to read data-tracks or burn a CDR. It works with SCSI/ATAPI - CDROM/CDR under Windows-95 or SCSI or other drives under Windows-NT which support this mode of reading. Under Windows-95 the module always uses the ASPI-interface (WNASPI32.DLL) to read the CDDA. Under Windows-NT the ASPI and the generic WIN32 interface are supported.

The module supports writing of many different file-formats (WAV, AU, RAW, MPG, MP3-WAV) especially MP3 (MPEG 1 Layer 3). This format is supported through various compressors like L3ENC, Mp3Compressor, the L3CODEC (MP3-WAV) of the FHS and the XING MPEG Encoder. Before writing this format always a WAV-File is first written to disk to reach maximum reading speed with the CDROM. Compressing the files to MP3 format is not very quick.

Full support of the CDPLAYER.INI and the CDDB - What the hell is CDDB ? CDDB is net of computers around the world which manage a database with information like artist, title and track title about all available CDs. (look at www.cddb.com to get further information) So you don't have to enter artist and tracks etc. before ripping. Just connect to internet insert a CD and press CDDB. After some seconds all information you need is on the screen.

The module supports sampling of tracks from different CDs in a comfortable way.



Options

Advanced

SCSI-Info

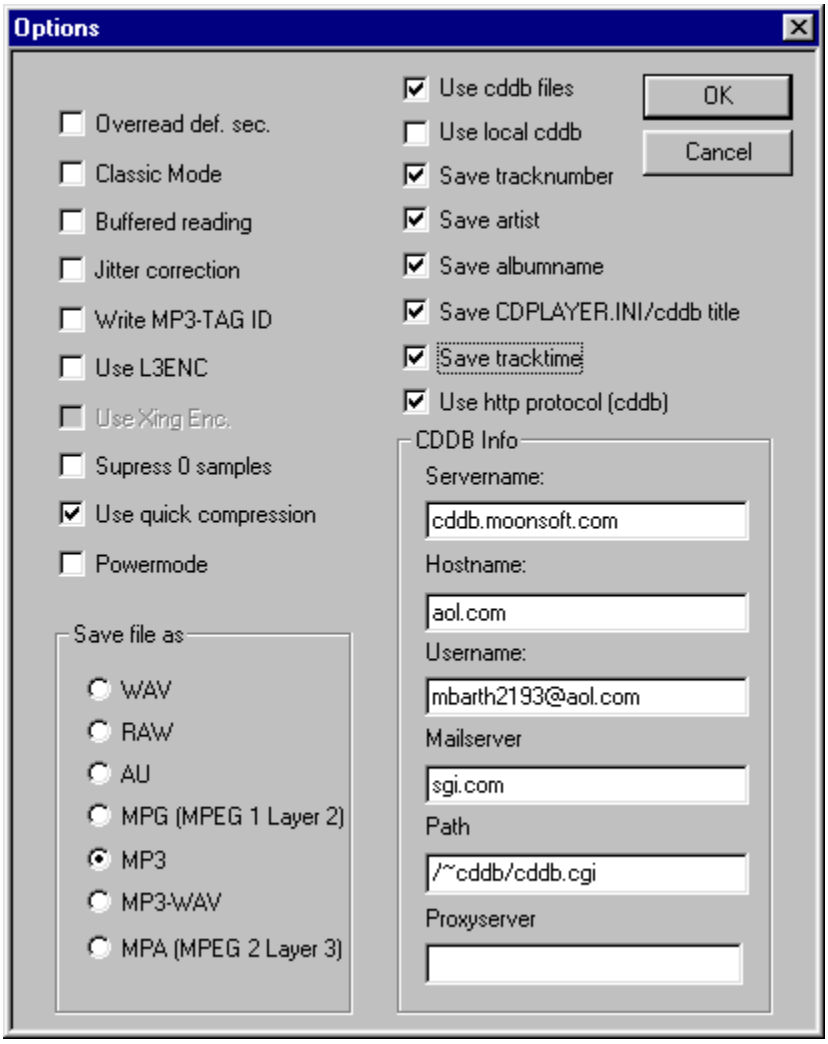
Save as

MP3-Tag Info

CDDB-file

Special thanks to all the people who supported me through various nights while making this module, especially to A. Katranis (a.katranis@ulm.netsurf.de) for excessive testing and permanent incentive, U2 for providing me with excellent music and all the others who reported errors and made useful suggestions.

Options



The program provides several options to manage the ripped files:

Overread def. sectors

Classic mode

Buffered reading

Jitter correction

Write MP3-ID Tag

Use L3ENC

Use Xing Encoder

Supress 0 samples

Use quick compression

Powermode

Use cddb files

Save tracknumber

Save artist

Save albumname

Save CDPLAYER.INI xmcd-title

Save tracktime

Use http-protocol

Servername

Hostname

Username

Mailserver

Path

Proxyserver

Overread defect sectors

If you have damaged CDs this options allows it to copy the tracks. Defect sectors are overread. If there are not too much of them you will not hear that.

Classic mode

Using the classic mode the selection of several tracks results in "one" physical file. If you burn that file there will be no gaps between the tracks. You are **not** able to select a specific track at your cdplayer. Look after the popular CD-writing module DAO which will allow to set those gaps.

Buffered reading

This options allows the module to read more than one sector at a time. This speeds up reading. If you have problems concerning reading try to reduce the number of the (Readbuffer) option in the Advanced menu.

Jitter correction

Checking this option invokes an algorithm during reading the CD which eliminates clicks and pops. Older drives are not able to read the sectors in a subsequent way. You can hear this in the resulting file through clicks and pops. By default elimination is done with 4 buffers. If you hear further distortions increase the Jitterbuffer in the Advanced
menu.

Write MP3-ID Tag

Some MP3-Players support the MP3-ID tag. This tag includes information about artist, music-category, recording year, track-title and a comment. If this option is checked the module writes the tag information to the written MP3 or MP3-WAV file. The requested information which can not be filled automatic must be entered before writing. This can be done in the menu MP3-Tag Info.

Use L3enc

This option activates the the L3enc module when selected and MP3 format should be written. The path to find the module can be entered under Compressorpath in the Advanced menu. By default the module uses a bitrate of 128kb. This can be changed through making an entry in CDCOPY.INI - Bitrate=x. If the option Use quick compression is checked the module works in this special mode.

Use Xing Encoder

When saving files in MP3 (MPEG 1 Layer 3), MPA (MPEG 2 Layer 3) or MPG (MPEG 1 Layer 2) format the Xing MPEG Encoder must be used for the MPA format. MPG can be written through built in routines or the Xing MPEG Encoder.

Supress 0 samples

If the ripped file contains samples which consist only of binary 0s (total quietness) these samples are not written to disk. You can save some diskspace.

Use quick compression

Some MP3-Compressor modules support a slow and a quick mode to encode the files. If this option is checked the quick mode - if supported - is used. This can result in files with a lower quality. People with "good ears" can hear that!

Powermode

The powermode is the fastest method to read the CDDA. During reading some samples the previous read samples are written. This mode of reading can result in files with bad quality. You should make an accustic control.

Use cddb files

Instead of retrieving CD-information from CDPLAYER.INI the module tries to open a cddb-file.
The name of the file is a calculated disk-id. This number is different to the id which is used to access the CDPLAYER.INI file. The module tries to open the file in the path which can be entered under cddbpath in the Advanced menu.

Save track number

Use the track number when building the filename for the track to write.

Save artist

Use the name of the artist when building the filename for the track to write. The name of the artist is taken from CDPLAYER.INI or a cddb-file.

Save album name

Use the album name when building the filename for the track to write. The name is taken from CDPLAYER.INI or a cddb-file.

Save CDPLAYER.INI cddb-title

Use the track name when building the filename. The track name is taken either from CDPLAYER.INI or a CDDB-file.

Save track time

Use the track time when building the filename for the track to write. Time is saved in format MM_SS_FF (minute, second, frame).

Use http-protocol

By default the module uses the CDDB-protocol to access the CDDB. If you check this option the module uses the http-protocol. If you do not have full access to the internet try it.

Server name

Here you can enter the name of the server where you want to make your cddb queries. A list of all available servers can be retrieved under www.cddb.com. Two of them are e.g. sunsite.unc.edu and cddb.moonsoft.com.
This information **must** be filled to make a query. Do not enter the http:// prefix before using a proxy server. Using CDDBP or direct HTTP no prefix must be entered.

Host name

The host name must be filled too to make a cddb-query. For AOL-users this is e.g. aol.com. Other requested information are Username, and Servername.

User name

The user name must be filled to make a cddb-query. You typically enter here your e-mail address.

Mail server

If you want to submit new entries to the cd-database a mail server-name must be entered here. New entries are submitted via e-mail.
If you don't get an e-mail after submitting a new entry there was no error in the file. You can make a new entry in the CDDB-file menu.

Path

To access the cddb using the http-protocol a path must be entered here. Typically this is /~cddb/cddb.cgi but not for all servers. Look at www.cddb.com to get detailed information which server uses which path.

Proxyserver

If you have only access to the internet through a proxyserver you must enter its name here. If you use this feature add the "http://" prefix for the servername.

Readbuffer

The readbuffer option determines how many sectors are read at a time. By default the value is 25. Most drives support values up to 28. If you have problems during reading reduce the value.

Jitterbuffer

If you hear clicks and pops after ripping a track use the Jitter correction to eleminate them. By default the module uses 4 buffers for the algorithm. If this is not enough - you still here the clicks - set the value up by 1 and try again.

Reading speed

Some drives are able to modify the reading speed. By default a value of 0 is shown here. This means the drive should work with its default-speed. Sometimes you need to reduce the speed for some drives to gain files with a better quality. The higher the reading speed the lossier the quality. This is not true for all drives. So if you have file of bad quality try to reduce the reading speed here. You can enter values like 1, 2, 4, 8, 12, 16 ...
The speed calculation of the main dialogue is done with a rate of 150KB! So it is possible that you reach higher values than your CDROM/CDR is nominal able to because the reading of the CDDA is done with 176 KB.

Compressorpath

Here you can enter a path to your favorite compressor-module. If you don't make an entry the module tries to activate the compressor through the PATH-variable set in CONFIG.SYS or AUTOEXEC.BAT.

cddbpath

This variable contains a path to your cddb-files. It is used for reading (showing the information in the dialogue) and saving (retrieving the cddb information). If you don't make an entry here the files are saved and read from the actual path where you have started CDCOPY.

Savepath

This variable defines where the ripped tracks should be placed. Make sure that you have enough space on this drive because they need much of it. How much space you need for the tracks is shown in the right half of the main dialogue or the listbox where the tracks are listed.

Force use of generic interface

This option only makes sense for users of Windows-NT. If the ASPI-interface is available under Windows-NT too (the generic WIN32 interface is built in) you can force the use of the generic WIN32 interface by checking this option. By default the module tries to initialize the ASPI-interface. So if it is found it is used. Using the generic interface an additional feature is supported if you have more than one drive: you can dynamic change the drives through a combobox in the main dialogue. Using this interface is not so CPU-intensive as when reading using the ASPI-interface.

Rescan

Pressing this button scans the CDROM/CDR for a new CD and refreshes all information.

Write

Pressing this button starts copying of the selected tracks. Files are written to the directory where you have started CDCOPY from or to the path you have entered under Savepath in the Advanced menu.

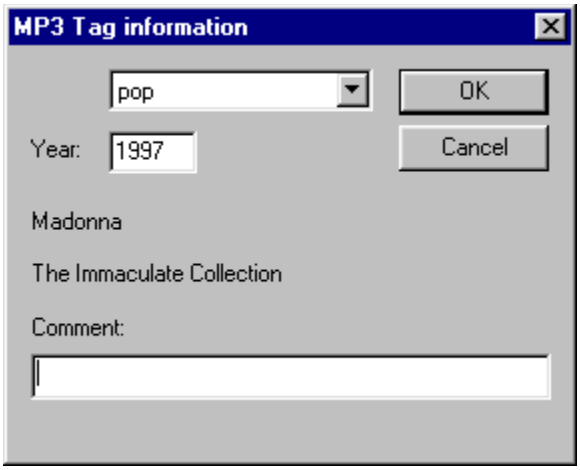
Sel./Deselect

Pressing this button selects/deselects all tracks in the listbox.

CDDB

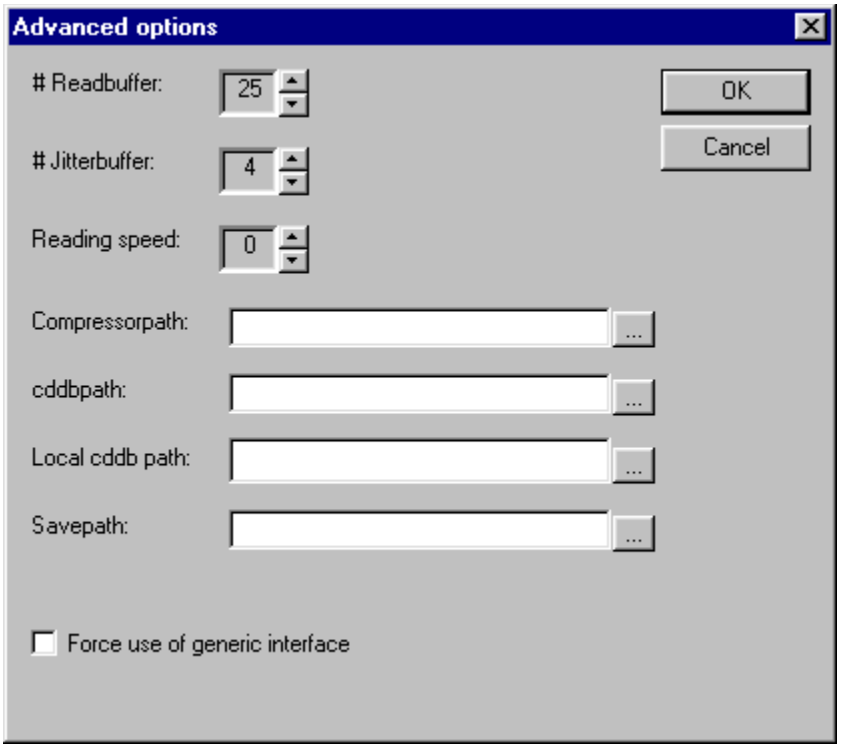
Pressing this button starts the query for the CD-database according to the protocol-information you have entered in the Options menu. Before a query can be started enter the requested information. If the module is configured for using the local cddb the module starts searching the files. A successful query results in a small file which is located in the cddb-path and the main dialogue is refreshed with the retrieved information.

MP3-Tag Info



Here you enter the information which is needed to write a MP3 id tag. Track title is taken from the listbox of the main dialogue. These information is written to file after compressing it. The information is located at the end of the file. Most of the MP3-players are able to show this information. Writing this information is possible for MP3 and MP3-WAV format. If you **rename** a MP3-WAV file to MP3 most of the Mp3-players are able to play it!

Advanced



The Advanced menu includes additional options:

Readbuffer

Jitterbuffer

Reading speed

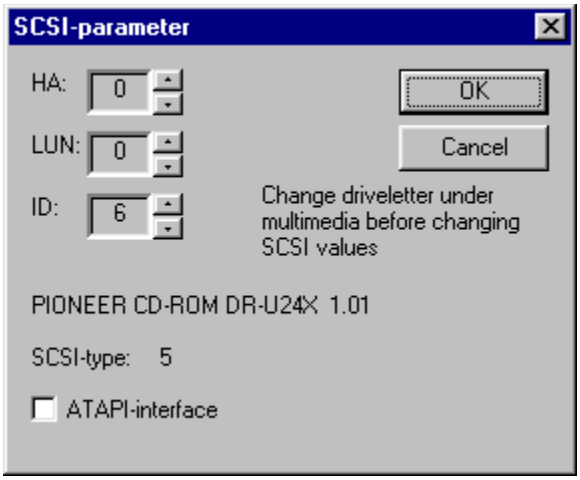
Compressorpath

cddbpath

Savepath

Force use of generic interface

SCSI-Info

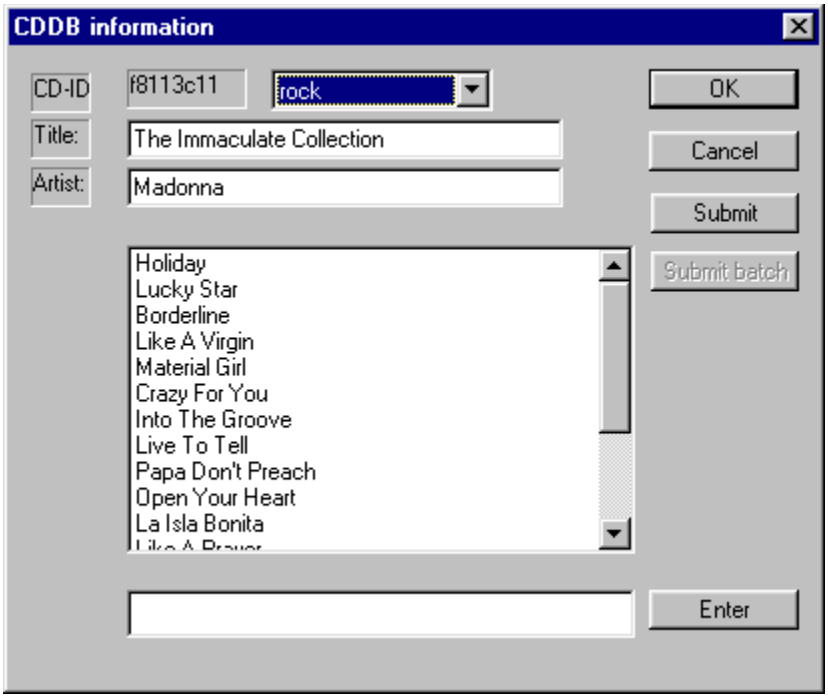


The SCSI-info dialogue shows all availabe SCSI/ATAPI devices. You can use it to find the configuration parameters (Hostadapter, Lun and ID) for specific drives. Before changing to another CDROM/CDR by changing the SCSI-parameters change the driveletter under system-control, multimedia, music-CD to the drive you want to read from. If you leave the dialogue by pressing th OK-Button. the module internally changes to this drive. To synchronize the CD-information you have to change the driveletter.

Write DAO-CUE-File

The popular CD-writing module DAO works with so called CUE-sheets. It is an description how the software should burn a CDR.
After ripping some tracks this option writes such a CUE-sheet for all selected tracks. It is a seq. file which can be edited with a normal text-editor.

CDDB-file



This dialogue enables you to enter all information which is needed to submit a new entry for the CD-database. Pressing OK saves the entered information in a cddb-file which resides in the path where you started CDCOPY from or the cddbpath which you can enter in the Advanced menu.

Pressing OK generates an e-mail from entered information which will be send to the CD-database. Make sure that you have
entered a valid mailservername and have an active internet-connection before submitting the information.

ATAPI-interface

This option enables a specific mode of reading. If you have problems reading your drive try this option. Some drive-types need it.

Save as

If you don't want to use the default savepath for the selected files, you can change it here. Select a drive, path and filename to specify where the file(s) should be located and how they are named. You don't need to specify an extension for the file(s). This is determined by the filetype you choose. If you have selected more than one file the tracknumber of the file(s) is automatic appended.

Use local cddb

A local version of cddb is also availabe. To retrieve more information about that look at www.cddb.com.
If this option is checked the modile tries to find the CD-information in the local CD-database which resides in the path which can be entered in the Advanced menu under Use local cddb.

Local cddb path

This variable contains the path to the local CD-database. This database has a special structure which should not be modified. The module expects the music categories as subdirectories of this path. If an entry is found here it is saved in cddbpath in the normal cddb-format (calculated diskid).

Registration

At the moment there is **no** restriction on none registered versions. I need the registration fee to finance my internet activities (distributing the program, answering the e-mails etc.) because in Germany this is very expensive.

Send personal money orders to:

Markus Barth
52511 Geilenkirchen
Holzmarkt 2
(Germany)

The registration fee is 20 US$ or 30,-- DM

To retrieve my bank account please send an e-mail to:

mbarth2193@aol.com

or

barthm@csb.de

If you want to buy the source of the module send an e-mail to the above mentioned addresses.

Suggestions

If you have any suggestions or errors reports please feel free to send me an e-mail. The actual version of CDCOPY is always available at http://members.aol.com/mbarth2193. **Please send feedback about supported drives**!

If you report any problems, please send the following information:

Version of CDCOPY you use
Vendor of your CDROM/CDR
Operating system
Which interface you use ASPI or WIN32 for Windows-NT