

InfraRecorder
Introduction

Welcome

Thank you for installing InfraRecorder! InfraRecorder is a free CD burning solution for Microsoft Windows.

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InfraRecorder

Feature Overview

This page lists the most essential features of InfraRecorder.

Main Features

- Create custom data, music and mixed-mode projects and record them to physical compact discs or disc images.
- Create and record disc images.
- Create direct disc copies, on the fly or by using a temporary disc image.
- Erase (blank) rewritable discs using four different methods.
- Import session data from multi-session discs and append more sessions to that kind of discs.
- Close discs (write lead-out information to prevent further data from being added to the disc).
- Scan the SCSI/IDE bus for devices and collect detailed information about their capabilities.
- Display detailed disc information.
- Read and save audio and data tracks to files (wav. and .iso)
- Scan selected tracks for errors.

Environment

- Modern customizable Windows Explorer like interface.
- Drag and drop files from the explorer view of the program and Windows Explorer to the project view.
- Uses different project view layouts for different type of projects to make the users work easier.
- Features a separate express application designed to guide the user to the most essential tools as quick and easy as possible.
- Fully translatable interfaces for the main application, express application and the shell extension.

Explorer Integration

Integrates with explorer and adds new shell context menu options.

- Record saved projects and disc images.
- Open and edit saved projects.
- Highly customizable, can be displayed in a submenu and with or without menu icons.
- The shell extension can be registered with any file extension that the user wants.

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Version 3, 29 June 2007

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Preamble

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The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same

gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these



InfraRecorder **System Requirements**

InfraRecorder has the following system requirements:

- Windows 98 with Internet Explorer 5.0 or newer.
- 32 MiB RAM.
- 8.1 MiB of available hard disk space.

InfraRecorder
Quick Start

How to Use?

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InfraRecorder
Copyright

InfraRecorder copyright © 2006-2010 Christian Kindahl.

InfraRecorder works in co-operation with the following software:

- cdrecord © 1995-2006 Jörg Schilling.
- readcd © 1987, 1995-2006 Jörg Schilling.
- cdda2wav by [Project MODE](#), [Fraunhofer Institut für integrierte Schaltungen](#).

InfraRecorder uses icons and derivative work based on the icons in the [Tango Icon Project](#). The derivative work based on the Tango Icons can be separately downloaded (under the [Creative Commons Attribution Share-Alike license](#)) from the official InfraRecorder website.

InfraRecorder **What's New?**

Version 0.53.0.0

- Fixed write speed detection issue.
- Fixed bug where maximum write speed would be used instead of the selected one when burning DVDs.
- Fixed bug in creation of UDF and ISO9660 file systems containing many files and folders.
- Relaxed ISO9660 duplicate file naming algorithm.
- Added support for non-standard character sets in ISO9660 file systems.
- Various minor GUI changes.
- The space meter will now automatically adjust if a blank DVD is inserted.

Version 0.52.0.0

- Fixed bug preventing reading and encoding audio tracks.
- Fixed DVD-Video file sorting bug, preventing fully compatible DVD-Video DVDs from being created.
- Added sane error message when failing to create DVD-Video file system.
- Devices with drive letters A or B are now detected properly.
- Fixed shortcut icons on Windows 7 64-bit.
- Added support for reading discs (creating disc image) to a network location.

Version 0.51.0.0

- Fixed bug causing desktop icons to disappear on Windows 7.
- Fixed bug causing InfraRecorder to crash when opening the burn dialog on systems with no recorder(s) present.
- Added support for burning files from UNC paths.

- Various other bug fixes.
- Increased maximum FIFO buffer size from 128 MiB to 800 MiB.



InfraRecorder **Installation**

The InfraRecorder installer supports different options/parameters for unattended installations. The following parameters can be passed to the installer:

/SRuns the installer (or uninstaller) silently. All options will be default unless overridden by another parameter to the installer.

/LANGUAGE=<language>

Selects the language that InfraRecorder should use. For example: "irsetup.exe /S /LANGUAGE=swedish" will install InfraRecorder silently with the default language set to Swedish.

For a more up-to-date list of questions and answers, please visit <http://infrarecorder.org>.

InfraRecorder does not my disc devices, how do I solve this problem? This is most likely a permission issue. By default InfraRecorder uses an interface called SPTI to access disc devices. On Windows 2000, XP and 2003 systems administrator permissions are required in order to use SPTI.

If you want to allow limited user accounts to access disc devices using SPTI, please do the following when logged in as an administrator:

1. Navigate "Start" then "Run" in the Windows start-menu.
2. Type "secpol.msc" without the quotes and press the OK button.
3. Navigate "Local Policies" then "Security Options" in the tree.
4. Change "Devices: Restrict CD-ROM access to locally logged-on user only" item from "Disabled" to "Enabled".

Please note that some versions of Windows (Windows XP home for example) does not have "secpol.msc". If using such a system please do the following instead (while logged in as an administrator):

1. Navigate "Start" then "Run" in the Windows start-menu.
2. Type "regedit" without the quotes and press the OK button.
3. Navigate "HKEY_LOCAL_MACHINE", "SOFTWARE", "Microsoft", "Windows NT", "CurrentVersion" and finally "Winlogon" in the tree
4. In the selected path, add a string value named "allocatecdroms" with the value "1" (without the quotes). If the string value already exist with the value "0", simply change it to "1".

How to Use?, Working with Projects

Getting Started

This topic will help you get started with your first custom CD project. InfraRecorder currently supports three kinds of projects.

Data Disc projects are used for creating discs that contains files and folders (using the ISO9660 filesystem) that can be used on almost any computer. Data discs does not hold as much data per sector as audio discs due to the fact that data discs also stores addition error-check/correction data. As a result of this, data discs can be recorded in higher speed without necessary loose any quality/data. Data discs can be created in multiple steps, allowing data to be added to existing CDs. See [this](#) topic for more information on the subject.

Audio Disc projects are used for creating audio discs that will play in any CD-player (and computer). Audio projects should normally be recorded at lower write speeds than data projects because audio discs does not contain any error-checking/correction data.

Mixed-Mode CD projects are used for creating discs that contains one first data track which shares the features of a *Data Disc* project followed by a number of audio tracks. A *Mixed-Mode CD* will play in any CD-player, but the first (data) track will sound like noise. The audio tracks will play as normal.

To create a new project, use the menu:

File ▶ New Project ▶ <select the type of project that you want to create>

To open an existing project, use the menu:

File ▶ Open Project...

or the toolbar button:



InfraRecorder projects can be recorded directly to a physical compact disc or to a disc image. A disc image is a file stored on your computer that contains all the file data that you have added to your project (with exception for audio tracks in *Mixed-Mode* and *Audio*

projects). A disc image can be recorded at a later time. See [this](#) topic for more information.

To record your project to a compact disc, you can use the menu:

Environment

General

The *Explorer View* toolbar is used for navigating the explorer view and for adding files that are selected in the explorer list view to your project.

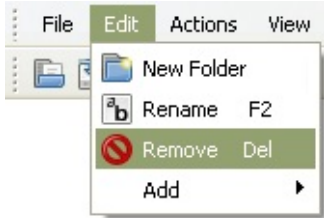


The *Disc Layout* toolbar is used for project navigation and management.

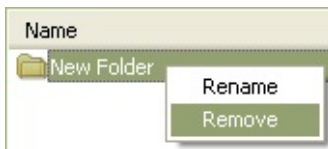


File Management

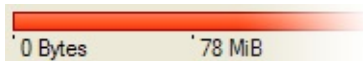
The *Edit* menu is used for project file management:



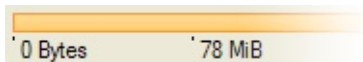
The options available from the edit menu (above) are also available for faster access by right-clicking in the project view. For example if your right-click on a folder this menu will appear:



If you add more data to your project than what the selected media can contain, the space meter at the bottom of the view will turn red:



The space meter will turn orange if the amount of data added to the project exceeds the official size of the media but will probably fit on the media if recorded with [overburn](#) enabled:



You can change the space meter size to match the actual size of the blank disc that you will record your project on. To do so, right click on the space meter and select the appropriate media size.

File Management

Add Files

There are many different ways to add files to your project. You can use drag and drop from the *Explorer View* and from Windows Explorer. You can also navigate the *Explore View* and select the files you want to include in your project.

When you have selected the files you want, you can use the menu:

Edit ➤ Add ➤ Selected

or the toolbar button in the *Explorer View* toolbar:



You can also use the *Explorer View* to navigate to a folder and quickly add all files and folder in that folder to your project.

To add all files and folder in the active *Explorer View* folder, use the menu:

Edit ➤ Add ➤ All

or the toolbar button in the *Explorer View* toolbar:



Remove Files

There are several ways of removing files and folders from your project. One way is to press the delete key on your keyboard. You can also use the menu or the toolbar button.

To remove files using the menu, do the following:

Edit → Remove

you can also use the toolbar button in the *Disc Layout* toolbar:



Other Operations

To rename a file or folder, use the menu:

Edit ▶ Rename

or the toolbar button in the *Disc Layout* toolbar:



To add a new empty folder to your project, use the menu:

Edit ▶ New Folder

or the toolbar button in the *Disc Layout* toolbar:



How to Use?, Working with Projects
Multi-Session Disc

A multi-session disc is a disc that contains multiple sessions. A multi-session disc can be recorded in multiple steps by recording one session at a time.

Creating New Multi-Session Discs

Creating a new multi-session disc is easy. To create a new multi-session disc, create a new data project:

File → New Project → Data Disc

Open the project properties:

File → Project Properties...

Select the ISO tab and change the *Format* to:

Mode 2 XA (multisession)

You can now add files and folder to you project as usual. See [this](#) topic for more information on how to work with projects.

Continue Multi-Session Discs

To add more data to an existing multi-session disc you must import the existing session data into your project. To do so, use the menu:

Actions ➤ Import Session...

A window will popup which allows you to select a device and view how much allocated and free space that is available on the disc. If the OK-button is greyed it means that the disc can not be imported.

When you have selected the device which has the multi-session disc that you want to import inserted. Press the OK-button and the data will be imported into your project. The imported data can not be manipulated or removed from the disc. All imported files and folders are displayed in grey text.

When are done working with the new session and want to add the new data to the disc, either use the menu:

Actions ➤ Burn Compilation ➤ to a Compact Disc...

or the toolbar button:



How to Use?, Working with Projects
Project Settings

This topic covers the project settings that are accessible from the menu:

File ▶ Project Properties...

General Settings

The only general setting that you are able to change is the disc label. The default suggested label is based on the date and time of when the project was created. Please note that the label applies to the same restrictions as general file names in the project (see the *ISO Settings* section).

ISO Settings

Level

This option sets the ISO conformance level which basically are different levels of file name restrictions. There are three levels supported in InfraRecorder:

1. Level 1 uses file names in the 8.3 format (eight characters with a three-character extension), upper case letters, numbers and underscore. The maximum directory depth is eight.
2. Level 2 allows file names to be up to 31 characters long.
3. Level 3 allows files to be fragmented (mainly to allow packet writing, or incremental CD recording).
4. Level 4 does not really exist, but when selected the ISO-9660:1999 (which is ISO-9660 version 2) standard is used. This standard allows file names to be up to 207 characters long and the directory structure may be more than eight levels deep.

Character Set

Defines the character set used in the local file names included in the project. InfraRecorder tries to automatically detect the character set used on your system.

Format

This option specifies the format that should be used when writing your project data to a disc. *Mode 1* is normally used when creating regular non multi-session discs while *Mode 2* should be used when creating multi-session discs. *Mode 1* allows 2048 bytes of data per sector, *Mode 2* allows 2336 bytes of data per sector (A CD-ROM sector is 2352 bytes large).

Other Options

The *Use Joliet file name extension* adds Joliet directory records to the disc in addition to regular ISO9660 file names. The joliet extension is commonly used on Windows systems and allows unicode file names with a maximum length of 64 characters.

If you want to use even longer file names you can enable the *Allow more than 64 characters for Joliet names* option. This is not fully compatible with the Joliet specification but seems to work. The maximum character length is extended to 103 characters.

The *Include UDF support in the generated file system* option is self explanatory. UDF support is currently in alpha status, and for this reason it's not possible to generate UDF only filesystems.

The *Omit version number from ISO9660 file names* option is self explanatory.

Fields

This section contains options to specify information about the people behind the CD-project. The *Publisher*, *Preparer*, *System* and *Volume set* fields should be edited directly, the other fields often contains file names due to the limited character length of 36 characters.

Audio Settings

This section allows you to create CD-Text information. CD-Text is a format supported by some (many?) CD-players that allows track and artist information to be displayed when the CD is playing. These options are available in audio and mixed-mode projects.

Boot Settings

This section is only available on data projects and allows you to specify up to 63 boot images that will be used to create an "El Torito" bootable disc. To add a new boot image to the project, click the *Add boot image* button:



Boot Catalog

This option specifies the path and filename of the boot catalog to be used when making an "El Torito" bootable disc. The path name should be relative to the root on the disc. The file will be inserted into the output tree and not created in the source filesystem. Please make sure that the specified file name does not conflict with an existing file.

How to Use?, Working with Projects
Add Boot Image

There are several options that you may need to configure when adding a boot image to your project.

Local Path

In this field you should specify the local path of the selected boot image. The path is relative to the root folder of the disc. For example: `/boot/` will create a folder called `boot` in the root that contains the file that you have selected.

Emulation Type

This option lets you specify the type of emulation that should be used on the "El Torino" boot disc. If the emulation type is set to *Floppy*, the boot image must be exactly the size of a 1200, 1440 or 2880 KiB floppy. If the emulation type is set to *Harddisk*, the boot image must begin with a master boot record that contains a single partition. Using no emulation will cause the system to load and execute the image without performing any disc emulation.

Advanced Options

The *Don't make image bootable* option allows you to prevent the disc from being marked as bootable. The system will provide an emulated drive for the image, but will boot off a standard boot device.

Enabling the *Write boot-info-table to the image* option will cause the boot image to be patched at offset 8 with a 54-byte table containing information about the disc layout. If this option is enabled the local boot image that you have specified will be patched, so make sure that you have a backup of this file if it can't be easily regenerated.

The *Boot load segment* option allows you to specify the load segment address (in hexadecimal) for no-emulation "El Torito" discs.

The *Boot load size* option allows you to specify the number (in hexadecimal) of virtual (512-byte) sectors to load in no-emulation mode. It's usually recommended to load the entire boot file. Some BIOSes may have problems if this size is not a multiple of 4.

How to Use?

Burn Image

To burn/record a disc image, you can either use the menu:

Actions → Burn Image...

or the toolbar button:



You will be prompted to select the disc image on your hard drive that you want to record.

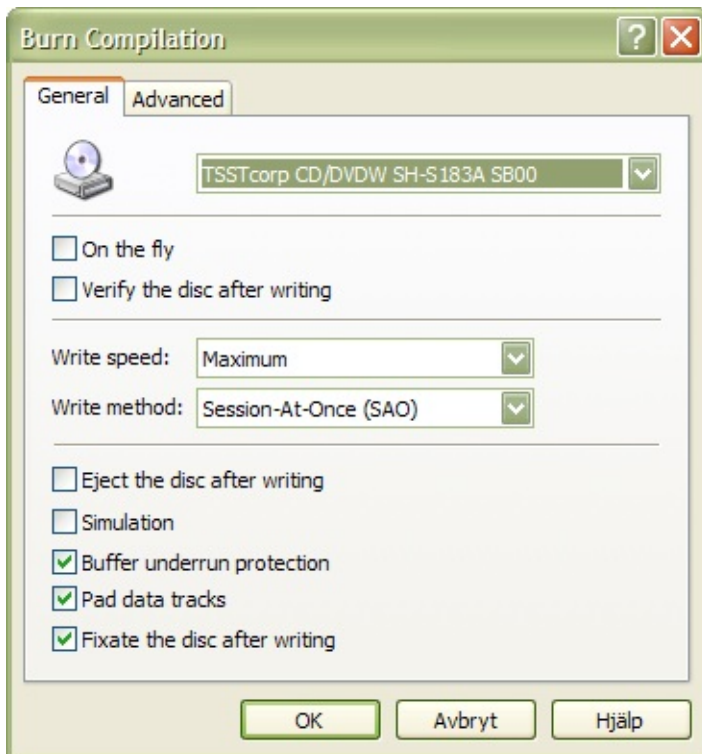
Options

A detailed description of the available options can be found in [this](#) topic.

How to Use? Burn Options

This topic covers the burn/recording options that appear on various places in InfraRecorder, for example when you want to burn a custom compilation, a disc image, or copy a disc.

Although these options are accessible in many different contexts, as mentioned above, they are always presented in a similar way:



General Settings

On The Fly

When recording on the fly, the file system will be generated while recording, which may increase the risk of write errors. If this option is turned off a temporary disc image will first be created on the hard drive and then recorded to the disc. The preferred setting is usually off; it should generally be enabled only when you are low on disc space.

Verify the Disc After Writing

Enabling this option will cause InfraRecorder to perform a CRC comparison between the files on your hard drive and the files on the newly recorded disc, to make sure that all files have been written to the disc without any problems.

Write Speed

Select the write speed to use when recording the disc. Selecting the *Maximum* option will automatically select the highest speed that the recorder is capable of.

Write Method

This option selects what method that you want to use when recording the disc. Only the options that your recorder supports will be available in the combo box.

Session-At-Once (SAO) often referred to as Disc-At-Once (DAO) writes all of the data (including lead-in and lead-out) in one pass, not allowing any interruptions in the data stream. Additional session/data cannot be added at a later time. Please note that DVDs must be written using this method.

Track-At-Once (TAO) writes each track independently, which requires link blocks between two tracks. Older recorders often force a two second pause (pregap) between two tracks, whereas newer recorders often can adjust the amount of pregap data (see the option described below).

TAO with zero pregap uses the Track-At-Once method described above and tries to set the pregap data length to zero, minimizing the number of link blocks between the tracks.

Raw writing (raw96r) writes data in raw mode using 2352 byte sectors plus 96 bytes of raw P-W subchannel data, resulting in a sector size of 2448 bytes. This is the preferred raw writing mode, since it gives the best control over the CD writing process.

Raw writing (raw16) writes data in raw mode using 2352 bytes sectors plus 16 bytes of P-Q subchannel data, resulting in a sector size of 2368 bytes. If a recorder does not support the raw96r raw writing mode, this is the preferred raw writing mode. This write method does not support CD-Text.

Raw writing (raw96p) writes data in raw mode using 2352 byte sectors plus 96 bytes of raw P-W subchannel data, resulting in a sector size of 2448 bytes. This is the less preferred raw writing mode, mainly because very few recorders support it and some of these recorders have bugs in the firmware implementation. Don't use this method if your recorder supports the raw96r or raw16 raw writing method.

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Other Options

Activating the *Simulation* option will cause InfraRecorder to perform the selected action but with the recorder's laser turned off. This option is recommended if you are unsure if the operation will succeed or not.

Buffer underrun protection is a feature in most newer recorders which allows the writing process to continue even if a buffer underrun error occurs. This feature often has different names by different vendors, for example: Yamaha Lossless-Link, Sanyo BURN-Proof, Ricoh Just-Link, etc.

The *Pad data tracks* option will cause each data track to be followed by 15 sectors containing zeros, and audio track data to be padded to be a multiple of 2352 bytes. You might want to enable this option if your CD-reader has problems reading the last sectors of a track or if you intend to use the disc on a Linux ISO-9660 filesystem with the read ahead bug.

Disabling the *Close the disc after writing option* will cause the last session (if using SAO mode) or track (if using a TAO mode) not to be closed. This can be useful if you want to record a CD in multiple steps.

Important: Creating a non-closed disc is not the same as creating a multi-session disc.

Advanced Settings

The *Allow overburning* option allows you to write more than the official size to a medium. Most blank media can hold more space than the official size, as the official size of the lead-out area on a disc is 90 seconds (6750 sectors) and a disc usually works with only 150 sectors of lead-out. All media may be overburned by at least 88 seconds (6600 sectors). Most recorders can do overburning only with the SAO and raw write methods. Some recorders limit overburning and limit a disc to certain size. This problem may be circumvented by writing the CD in raw mode , which gives the recorder no chance to find the medium size before starting the recording process.

When the *Swap audio byte order* option is enabled, audio data is assumed to be in byte-swapped (little-endian) order. Some types of recorders for example from Yamaha, Sony and the new SCSI-3/MMC recorders require audio data to be presented in little-endian order, while other recorders require audio data to be presented in big-endian (network) byte order normally used by the SCSI protocol. The byte order required by your recorder will automatically be detected. The only time you may want to use this option is if your data stream is in Intel (little-endian) order.

Ignore medium size can be enabled when you want to ignore the known size of the medium. It should be used with extreme care. This option implies overburning.

The *Set the SCSI IMMED flag* option will, as the name suggest set the IMMED flag for certain SCSI commands. Setting the IMMED flag will request the commands to return immediately while the operation proceeds in the background, making the bus usable for other devices and avoiding a system freeze. This can be useful on broken systems with ATAPI hard disk and CD/DVD-writer on the same bus or with SCSI systems that don't use disconnect/reconnect. These systems will freeze while blanking or closing a disc, or while the recorder is filling up a session to the minimum amount. Please note that not all recorders support the IMMED flag.

Yamaha Audio Master C.D. is a feature which is used to create high

Yamaha Audio Master Q. R. is a feature which is used to create high

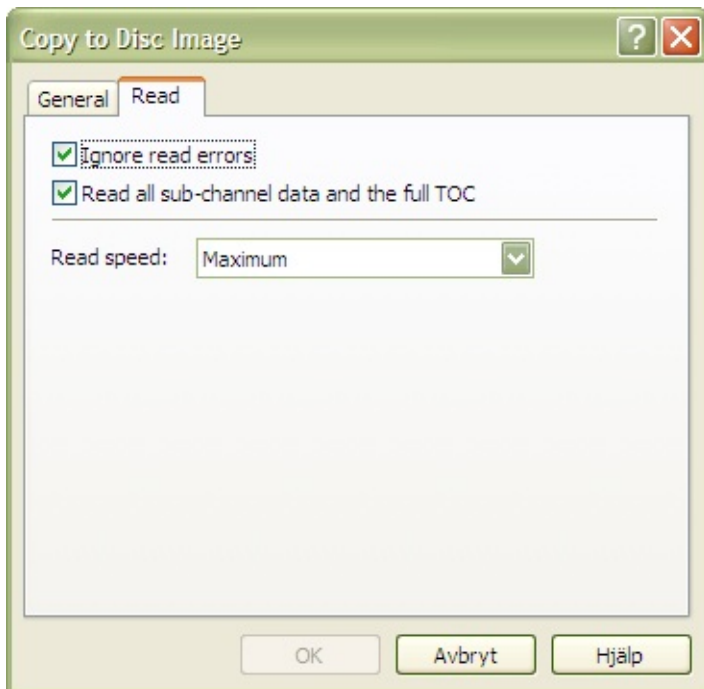
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How to Use? Read Options

This topic covers the read options that appear on various places in InfraRecorder, for example when you want to copy a disc either to a disc image or to another disc.

Although these options are accessible in many different contexts as mentioned above, they are always presented in a similar way:



Read Settings

Ignore read errors

Enabling this option will cause the high level error checking not to abort when errors are found in the data stream. The drive will also be switched into a mode where it ignores read errors in data sectors that are a result of uncorrectable ECC/EDC errors before reading.

Read all sub-channel data and the full TOC

When this option is enabled the disc will be read with all sub-channel data and a full TOC. The full TOC data will be put into a file with similar name to the specified image name but with the suffix **.toc**.

Read speed

Select the speed to use when reading the disc. Selecting the *Maximum* option will automatically select the highest speed that the drive is capable of. Only MMC compliant drives will benefit from this option. The speed of non MMC drives is not changed.

Using a lower speed may increase the readability of a disc.

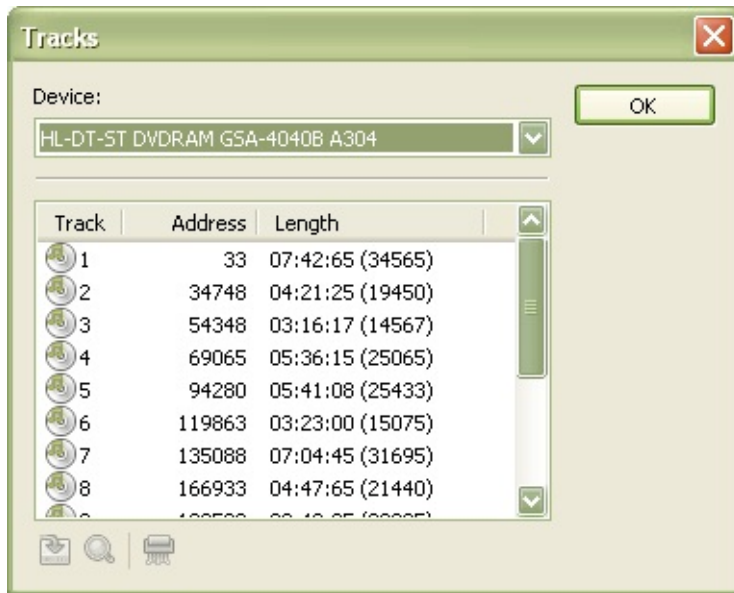
How to Use?

Copy Audio Disc

Copying an audio disc requires more steps than copying a data disc. First you must save the audio tracks on your hard drive. To do so, open the tracks dialog by:

Actions ▶ Manage Tracks...

The windows should look similar to this screenshot when you have selected your source device and inserted an audio disc:



Now select the tracks you want to save (copy) by clicking and holding the shift or control button. When you have selected the tracks press the *save tracks button*:



You will now be prompted to select a target directory for the tracks. Please go ahead and select a folder of your choice. When you have selected a folder all the tracks that you have selected will be saved there (unless any major read errors occurred).

Your next step is to create a new audio project and add the tracks you just saved to it. Please read this [topic](#) for more information.

How to Use?

Copy Data Disc

Please note that this page contains information on how to copy a data disc. If you want to copy an audio disc (which is an entirely different process) please see [this](#) topic.

When you want to copy a data disc you have two main options which is if you want to copy the disc directly to another drive (for example from a CD-reader to a CD-recorder) or to a disc image on your hard drive.

Copy to a Compact Disc

To copy a disc directly to another drive, use the menu:

Actions → Copy Disc → to a Compact Disc...

or the toolbar button:



Source

Select the source drive which contains the compact disc that you want to make a copy of.

Target

Select the target drive which contains the empty compact disc that you want to write the copy to. Please note that the target drive can not be the same as the source drive.

On The Fly

Writing *on the fly* means that the data will be read from the source drive and then directly written to the target (recorder) without any buffering on your hard drive (only a relatively small memory buffer is used). If your source drive would fail to read some sectors on the source disc it might not be able to supply the target (recorder) with data fast enough, resulting in write errors on the target disc. However most new recorder offer some kind of buffer underrun protection technology that should protect the target disc if this event occurs.

When the *On the fly* option is disabled a temporary disc image will first be created on your hard drive. The disc image will then be written to the target drive. Using this option requires more free disc space on your hard drive but is recommended in most cases.

Clone Disc

When this option is enabled all sub-channel data and the full TOC on the source disc will also be copied to the target disc. This option must be enabled when copying a mixed-mode disc, otherwise only the data track will be copied. It's recommended that you record the target disc using the raw96r write method. If that method is not supported by your recorder, please try the raw16 write method.

Read Options

The read options are described in [this](#) topic.

Other Options

The other options are described in [this](#) topic.

Copy to a Disc Image

To copy a disc to a disc image on the hard drive, use the menu:

Actions → Copy Disc → to a Disc Image...

Source

Select the source drive which contains the compact disc that you want to make a copy of.

Image File

Select the location and name of the disc image. Please note that you will approximateley need the same amount of size available on your hard drive as the compact disc contains.

Read Options

The read options are described in [this](#) topic.

How to Use?

Disc Information

To view detailed information about a disc, please use the menu:

Actions ➤ **Disc Information** ➤ <select the drive containing the disc that you're interested in>

Field Information

The *Disc type* field displays what type of disc that is inserted in the drive. For example: CD-R, DVD+R DL.

The *Book type* field is only valid on DVD discs and displays of what book type the DVD is.

The *Region* field displays what region encoding the DVD has. The region number can be resolved into the following regions:

1. United States of America, Canada.
2. Europe, including France, Greece, Turkey, Egypt, Arabia, Japan and South Africa.
3. Korea, Thailand, Vietnam, Borneo and Indonesia.
4. Australia and New Zealand, Mexico, the Caribbean, and South America.
5. India, Africa, Russia and former USSR countries.
6. Peoples Republic of China.
7. Unused.
8. Airlines and cruise ships.
9. Expansion (often used as region free).

The *Layers* field displays the number of layers on the disc.

The *Tracks* field displays the number of tracks on the disc.

The *Sessions* field displays the number of sessions on the disc.

The *Status* field displays information about the disc and session status as well as information on if the disc is erasable or not.

The *Used space* field displays the amount of used space on the disc.

The *Free space* field displays the amount of free space on the disc.

How to Use?

Erase Disc

To erase a rewritable disc, you can either use the menu:

Actions → Erase Rewritable Disc...

or the toolbar button:



Recorder

Please select the recorder that you want to use for erasing the disc.

Erase Method

Select one of the four erase methods to use. The *Erase the entire disc* method will destroy all data on the disc. This operation may take a long time. Using the *Minimally erase the disc* method will only cause the table of contents (TOC), PMA and pregap to be erased. Basically the actual data is never erased from the disc (it will not be accessible), the data will instead be overwritten when you write to the disc the next time. This method is very fast and can often be done in about 10 seconds. The *Unclose last session* method uncloses the last session (on a closed multi-session disc) allowing more sessions to be added to the disc. The last method *Erase last session* will simply just erase the last session on the disc. This may take long or short time depending on the size of the session.

Other Options

If the table of contents (TOC) for some reason has been damaged on a disc, InfraRecorder will not erase the disc unless the *Ignore illegal TOC* option is set.

Activating the *Simulation* option will cause InfraRecorder to perform the selected action but with the recorder's laser turned off. This option is recommended if you are unsure if the operation will succeed or not.

How to Use?

Close Disc

A closed disc is a disc that is considered to be finished. Normally a disc is automatically closed after recording data. This tool is useful if data has been written but the disc for some reason hasn't been closed. To close a disc, use the menu:

Actions → Close Disc...

Recorder

Please select the recorder that contains the disc that you want to close.

Other Options

Activating the *Simulation* option will cause InfraRecorder to perform the selected action but with the recorder's laser turned off. This option is recommended if you are unsure if the operation will succeed or not.

How to Use?

Manage Tracks

The *Manage Tracks* tool displays table of contents (TOC) information about a certain disc. It does also offer tools to save and verify selected tracks. To open the track manager, use the menu:

Actions ▶ Manage Tracks...

Select the tracks that you want to work with by clicking the mouse while pressing the shift or control key. You can also use the keyboard arrows to navigate and select in the track list.

When you save tracks to your hard drive you will be prompted to select a target directory. The tracks will then automatically be saved and named by their track number and type (Track 1.wav, Track 2.iso). To save the selected tracks to you hard drive, press the *save tracks* button:

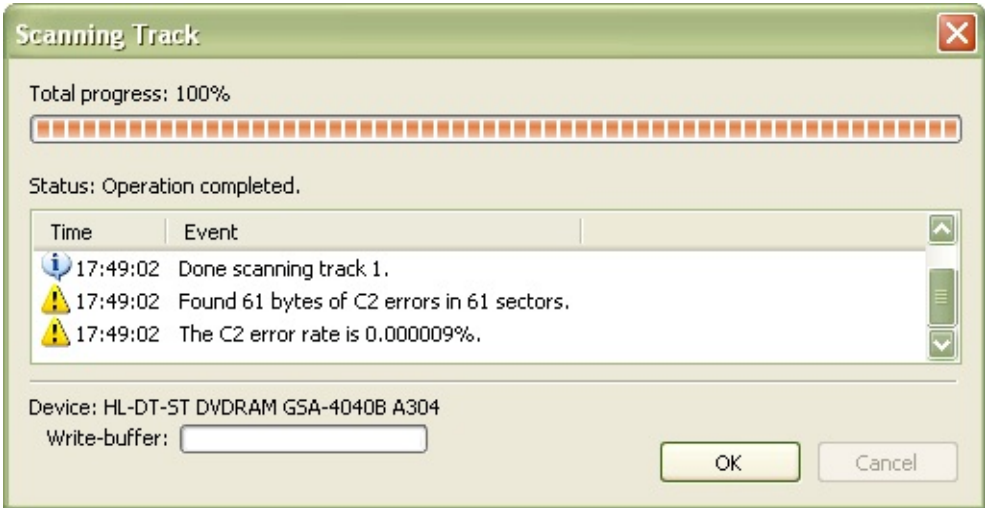


To scan the selected tracks for errors, use the *verify tracks* button:



Screenshots

The result after verifying a data track:



If you have many any changes in your hardware configuration you probably want to make InfraRecorder aware of the changes. To display the InfraRecorder device configuration, use the menu:

Options ▶ Devices...

You will now see a list of devices that have been detected by InfraRecorder. If you want to update the configuration, press the *Rescan* button. This will cause InfraRecorder to perform a full system scan gather information about all supported devices.

If you want InfraRecorder to silently validate the configuration everytime you start it, enable the *Silently validate the configuration at startup* option.

How to Use?
Configuration

To access the InfraRecorder configuration, use the menu:

Options → Configuration...

General Settings

The *Check if autorun is enabled on each startup* option specifies whether you want InfraRecorder to check if autorun enabled on each startup or not. It is recommended that autorun is turned off because leaving autorun enabled causes Windows to poll the CD drive while recording, which might damage your CD.

If you want InfraRecorder to remember the last active folder in the *Explorer View* you should check the *Remember the last active folder* option. You can also specify a folder on your own that will be the default every time InfraRecorder starts.

The *Temporary folder* option lets you specify which folder that should be used when temporarily storing files on your harddrive, for example disc images. If your harddrive/partition (which stores the temporary folder) is almost full it can be a good idea to use a temporary folder on another drive.

Advanced Settings

If you want to enable the log feature of InfraRecorder, enable the *Enable program log* option. This can be useful when trying to locate a possible bug/error in InfraRecorder. It's not recommended that you enable log support if you do not intend to log a special event because InfraRecorder requires more memory and CPU-time when the log support is enabled.

The *Enable smoke effect* option enables or disables the smoke effect displayed during writing processes. The smoke effect requires Windows Vista Aero to be enabled. If Aero is not enabled this option will have no effect.

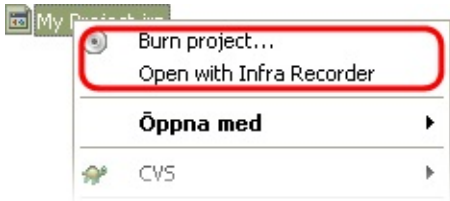
The *FIFO buffer size* option lets you specify the size of the RAM buffer that is used in addition to your recorder's physical buffer. Increasing the buffer size may result in a more stable recording process. As a rule of thumb, the FIFO size should be at least equal to the size of the physical buffer of the CD/DVD-Recorder and no more than half of the physical amount of RAM available in the machine. If you often record discs on-the-fly, this buffer should be large (for example 128 MiB) to prevent buffer underruns.

Language Settings

A list of available languages are displayed in the combo box. To change language, simply select the language you want in the combo box, click the OK-button and restart InfraRecorder. If your language is not available, check the InfraRecorder website to see if a translation in your language exists.

Shell Extension

The shell extension (when enabled) adds additional menu entries to the shell context menu:



It adds the options to record disc images and InfraRecorder projects just by right-clicking on them.

The shell extension can be customized to display the items in a submenu. To display the context menu items in a submenu enable the *Display context menu items in a submenu* option.

It can also be customized to not display icons on the menu items by disabling the *Display menu item icons* option.

Register the Shell Extension

The shell extension does not work automatically with disc images and InfraRecorder projects. When enabling the *Enable InfraRecorder shell extension*, InfraRecorder tells Windows Explorer that it offer other applications to use it's extended features.

To make Windows Explorer use the additional features supplied by the InfraRecorder shell extension, the shell extension must be registered with the file types that should be able to use the extra features.

There are a set of predefined file extensions available in the list. To associate the InfraRecorder shell extension with a file type, just check the item in the list view. You can add any additional file types to the list by pressing the *Add file extension* button:

