

Overview

Total Recorder is a sound recording and playing program. It records analog sound digitized by a sound card, as well as sound generated, or requested, by other computer programs, such as RealPlayer, Windows Media Player, Quick Time, WinAmp, and many others. Recorded sound is saved in wave-file format, or you can use external programs to save recorded sound in MP3 or Ogg Vorbis format.

For example, you can use Total Recorder to record:

- audio from the Internet, either audio files or live streams
- music from a game program
- a conversation, if you use an Internet telephony program.

Total Recorder uses a virtual sound driver to capture the sound output from another program. By installing this driver, and setting this device as the default, different sound reproducing programs send their output stream to Total Recorder's driver and not to the driver of a real device. Total Recorder then passes the information to the sound card driver.



Total Recorder has a built-in scheduler. This allows you to automatically record a show at a given time for later playback or you can use the scheduler as an alarm. Note that this latter function does not require registration.

Total Recorder Editions

Total Recorder is distributed as the Standard Edition (SE), the Professional Edition (PE), or the Developer Edition (DE).

With **Total Recorder Professional Edition** you receive the following:

- All the features provided by Total Recorder Standard Edition.
- Many other additional features, such as the ability to edit sound data, advanced scheduler settings, and much more.

With **Total Recorder Developer Edition** you receive the following:

- All the features provided by Total Recorder Professional Edition.
- Interfaces that give you the ability to write your own application, using COM and Automation technologies, to control Total Recorder. Your application can include, or extend, Total Recorder's functionality as you choose.

Parts of this document that deal with a particular Total Recorder edition are noted throughout. The screen captures in this document are for Total Recorder Professional Edition. Controls or elements that are not available in the Standard Edition are noted.

For information on writing an application that uses the Total Recorder's objects/interfaces provided by Total Recorder Developer Edition, refer to the Automation On-Line Help (TotRecAuto.hlp).

You can use the “Help”-“About” menu to see which edition is installed on your computer.

Total Recorder Standard Edition Version 4.1

In addition to maintenance, Version 4.1 Standard Edition includes the following changes:

- Full support for the Ogg Vorbis format. For more information, see "[Using the Ogg Vorbis Tab](#)" and "[Working with Ogg Vorbis Format](#)".
- "[Jump to time](#)" feature lets you easily navigate to a particular point in a sound file.
- Improved displays of the [properties](#) of files and recordings.
- Improved user interface and other minor enhancements.

Total Recorder Professional Edition Version 4.1

In addition to maintenance and new features added to Standard Edition, Version 4.1 includes the following changes:

- Sound image visualization. This helps you navigate in sound data and allows you to see portions of sound with different characteristics.
- Ability to close the player after a scheduled recording completes. For more information, see "Scheduling a Job".
- The Split mode feature has been enhanced so that a file can be split based on a low level of sound being recorded. For more information, see "Using the Split recording conditions Dialog".
- "Split now" feature has been added.
- Advanced stop recording conditions have been extended. A recording can be stopped based on a low level of sound being recorded. For more information, see "Using the Advanced stop recording conditions Dialog".

Version Information

Version 4.1

Total Recorder Standard Edition

- Full support for the Ogg Vorbis format.
- "Jump to time" feature lets you easily navigate to a particular point in a sound file.
- Improved displays of the properties of files and recordings.
- Improved user interface and other minor enhancements.

Total Recorder Professional Edition

- Sound image visualization. This helps you navigate in sound data and allows you to see portions of sound with different characteristics.
- Ability to close the player after a scheduled recording completes.
- The Split mode feature has been enhanced so that a file can be split based on a low level of sound being recorded.
- "Split now" feature has been added.
- Advanced stop recording conditions have been extended. A recording can be stopped based on a low level of sound being recorded.

Version 4.0

Total Recorder Standard Edition

- The ability to directly use playback and recording devices. For more information, see "Using the System Tab".
- Extended functionality of the "Undo" and "Redo" operations. For more information, see "Editing a Sound File".
- Sensitivity of the sound level indicators has been increased. For more information, see "The Total Recorder dialog overview".
- Improved user interface.

Total Recorder Professional Edition

Total Recorder Professional Edition Version 4.0 is the first version in a family of professional editions. The Professional Edition covers all features provided by the Standard Edition and provides the following additional features:

- The ability to edit sound data. You can use the Clipboard for cut, copy, and paste operations, and insert a sound file anywhere in a recording. For more information, see "Editing a Sound File".
- Split mode. A recording can be automatically split into separate files based on different conditions. For example, a new file can be created once a recording reaches a certain

size or after a specified amount of time. For more information, refer to the "Split mode overview".

- Advanced file name generation rules let you specify options for the names of automatically generated files. These can be files created in split mode or by a scheduled job. For more information, refer to the "Specifying File Name Generation Rules".
- Advanced options for automatically stopping a recording. For example, you can restrict a recording by time or size, or specify a time limit for no sound being recorded. For more information, refer to the "Using the Advanced stop recording conditions Dialog".
- The ability to play an Internet transmission when a scheduled recording starts. For more information, refer to the "Tuning into Internet Transmissions".
- Other minor enhancements.

Version 3.4

- The ability to regulate the level of sound being recorded from a software source.
- Total Recorder can preserve pauses in a recording.
- The incompatibility with Lame encoder versions 3.90 and 3.91 is resolved.
- A frequency for writing cached data can be set. This can help prevent clicks and gaps in recordings.
- Diagnostic tools are enhanced.
- Compatibility with some software has been improved.

Version 3.3

- The sound level for each channel is displayed separately.
- The ability to schedule a job to run on weekdays or weekends.
- Version 3.3 is completely compatible with Windows XP.
- Other minor improvements.

Version 3.2

- Pre-recording mode. In this mode Total Recorder records continuously and stores the last specified number of seconds of data. When you push the Record button, this data is added to the beginning of your recording.
- The ability to edit ID3v2 tags.
- Automatic removal of gaps while recording in software mode.
- Improved stability and compatibility.

Version 3.0

- The ability to play and record compressed sound using installed codecs.

- The ability to use external MP3 modules for recording in MP3 format.
- Compatibility with Windows Millennium Edition.
- A Fast-save capability.
- Automatic stop after a specified amount of recording time.
- Interface improvements.

Version 2.2

- Support for Windows NT 4.0 and Windows 2000.
- The ability to resample a recording (i.e. change sound stream parameters). Resampling can be done either during the recording process or when you save a recording.
- The maximum recording size is no longer limited to 2GB. It is now possible to record up to 49 continuous days. However, since an individual .wav file has a limit of 4GB, a long recording must be broken into pieces in order for it to be saved.
- A save progress indicator.
- The ability to increase the priority of the Total Recorder program and provide cleaner recordings.
- The ability to normalize the volume of a recording.

Version 2.1

- Accelerated recording/converting. This allows you to convert a sound file to standard wave format without listening to it. This operation normally takes a fraction of the time it would require to play the file.
- Markers. These allow you to select and save only part of a recording or part of an existing wave file.
- The ability to continue recording to the same file after it was stopped.
- A level indicator reflects the amplitude of a signal during recording and playback.
- The ability to have more than one open copy of Total Recorder (like in version 1.0).

Version 2.0

- Capturing and recording of sound streams that programs request from a sound card. This allows full duplex recording of Internet phone conversations when using programs such as NetMeeting and VoxPhone.
- Recording from CD, microphone and other input lines.
- Built-in scheduler that allows you to program jobs (record or playback) to start at a given time, similar to programming a VCR.
- Command line parameters that allow you to use an external scheduler such as Microsoft Task Scheduler to schedule a recording or playback.

- Automatic installation and uninstallation of the virtual device driver.

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System Requirements

To use Total Recorder, you need the following:

- an IBM compatible computer
- a sound card
- Microsoft Windows 95, 98, ME (Millennium Edition), 2000, Windows NT 4.0 or Windows XP.

Program Restrictions

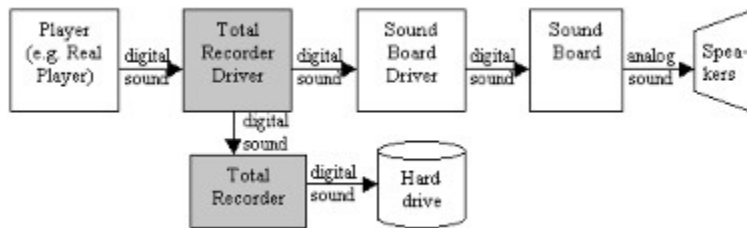
Total Recorder records wave-type sound streams only. It cannot record any of the following:

- Sound reproduced by means of MIDI-output, unless your sound card has a special MIDI synthesis line (most sound cards have this feature).
- Sound reproduced by programs developed for systems other than Windows 95/98/Me or NT/2000/XP (e.g. DOS programs executing in DOS sessions).

Total Recorder can record only one output and one input sound stream at a time. If a sound card allows simultaneous output of several wave-streams and can mix these streams itself, then Total Recorder can only record one of these streams.

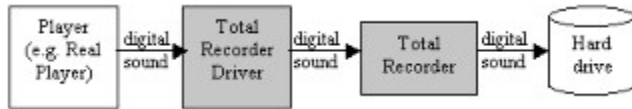
How Software Recording works

The following diagrams illustrate, in more detail, how Total Recorder works when it captures and record sound played back or requested by other computer programs.



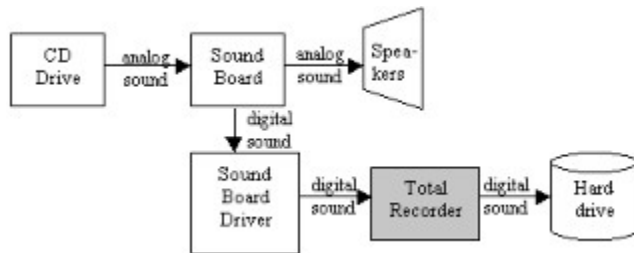
How Software Accelerate Recording works

The following diagrams illustrate, in more detail, how Total Recorder works when it speeds up (or down) capturing and recording sound played back other computer programs. In this mode you could not hear a sound when a recording is in process.



How Board Recording works

The following diagrams illustrate, in more detail, how Total Recorder works when it records sound digitized by a sound card. This includes a microphone, CD or other input lines.



Package content

Total Recorder is shipped via the Internet, as a self-extracting or regular archive, and consists of the files listed below. The following table indicates each file name, a description, the environments in which each file is required, and the Total Recorder editions in which each file exists.

File	Description	Required on Windows 95/98/ME	Required on Windows 2000/NT 4/XP	Edition
TotalRecorder.exe	Total Recorder program	Yes	Yes	All
TotRecSched.exe	scheduler program	No	Yes	All
DrvTR95M.drv	device driver	Yes	No	All
DrvTRNTM.dll	device driver	No	Yes	All
DrvTR95L.dll	device driver library	Yes	No	All
DrvTRNTL.dll	device driver library	No	Yes	All
DrvTR95.vxd	virtual device driver	Yes	No	All
DrvTR95.inf	driver installation file	Yes	No	All
OEMSETUP.inf	driver installation file	No	Yes	All
TotalRecorder.hlp	help file	Yes	Yes	All
TotalRecorder.cnt	help content file	Yes	Yes	All
Setup.exe	Install/uninstall program	Yes	Yes	All
DrInst.exe	driver install/uninstall program	Yes	No	All
License.txt	License agreement file	Yes	Yes	All
Readme.txt	Read-me first file	Yes	Yes	All
Registration.txt	Registration form	Yes	Yes	All
TotalRecorder.tlb	Type library	Yes	Yes	DE
Automation\ TotRecDemoClient.exe	demo client application	Yes	Yes	DE
Automation\ TotRecAuto.hlp	Automation support help	Yes	Yes	DE
Automation\ TotRecAuto.cnt	Automation support	Yes	Yes	DE

	help content file			
Automation\ TotalRecorder_i.h, TotalRecorder_i.c	Sources for using Total Recorder objects in C++ client applications	Yes	Yes	DE
Automation\Samples\CPP*.*	C++ samples for demonstrating Total Recorder's Automation support	Yes	Yes	DE
Automation\Samples\VBA\ *.*	Visual Basic samples for demonstrating Total Recorder's Automation support	Yes	Yes	DE

Installing Total Recorder overview

Beginning with version 3.0, Total Recorder uses a new format of the registration key. If you install version 4.1 over a version of Total Recorder that is older than 3.0, it will be unregistered until you enter a new registration key. Beginning with version 4.1, Total Recorder Developer Edition uses a new format of the registration key. If you install version 4.1 Developer Edition over a registered version of Total Recorder, it will be unregistered until you enter a new registration key. The “Registering Total Recorder” section describes how to obtain a key, once you have installed and configured the software.

If you install version 4.1 (Standard Edition) over a registered version of Total Recorder 3.x, a new registration key is not required.

If you install version 4.1 (Professional Edition) over a registered version of Total Recorder 4.0 (Professional Edition), a new registration key is not required.

Note: Different editions of Total Recorder have different registration keys. For example, you cannot use the registration key for Total Recorder Standard Edition in either Total Recorder Professional Edition or in Total Recorder Developer Edition.

Specific Information for Windows NT

Specific Information for Windows 2000/XP

Installation Steps

Specific Information for Windows NT

To install Total Recorder on Windows NT, you need the "Load and Unload Device Drivers" user right. Normally, only administrative users have this right.

To use the Total Recorder program, you do not need any special rights. However, the Total Recorder setup program changes settings only for the user who installed the program. Any other user must manually set the Total Recorder driver as a preferred device (see [Installing/Uninstalling the Total Recorder Driver Manually](#)).

Specific Information for Windows 2000/XP

Windows 2000 and Windows XP are members of the Windows NT product family. All of the information in the previous section ([Specific Information for Windows NT](#)) applies to Windows 2000/XP.

If you are planning to upgrade your Windows 95/98/ME system to Windows 2000/XP, you must take the following steps:

1. Before upgrading your Windows environment, uninstall Total Recorder.
2. After the upgrade is complete, reinstall Total Recorder.
3. Re-register Total Recorder. You should have your registration information available.

Note: Total Recorder will not work if you simply upgrade your Windows environment to Windows 2000/XP without taking the steps described above.

Installation Steps

Version 4.1 cannot coexist on the same machine with any previous version (1.0, 2.0, 2.1, 2.2, 3.0, 3.2, 3.3, 3.4 or 4.0). The different editions (Standard Edition, Professional Edition and Developer Edition) of Total Recorder cannot be installed on the same computer.

Take the following steps to install Total Recorder on your PC:

1. Download the self-extracting archive and run it
For the Standard Edition:
TR41SE.exe (<http://www.highcriteria.com/download/TR41SE.exe>)

For the Professional Edition:
TR41PE.exe (<http://www.highcriteria.com/download/TR41PE.exe>)

For the Developer Edition:
TR41DE.exe (<http://www.highcriteria.com/download/TR41DE.exe>)

OR

Download the archive, as listed below. Unzip it and run `Setup.exe`. Note that you must unzip the entire archive not just the `Setup.exe` file.

For the Standard Edition:
TR41SE.zip (<http://www.highcriteria.com/download/TR41SE.zip>)

For the Professional Edition:
TR41PE.zip (<http://www.highcriteria.com/download/TR41PE.zip>)

For the Developer Edition:
TR41DE.zip (<http://www.highcriteria.com/download/TR41DE.zip>)

If you have a previous version installed, you are prompted to uninstall it. Press “OK” to continue with the installation. Press “Cancel” if you want to exit the installation program without installing the software.

The installation program creates a directory for Total Recorder, copies all of the files to that directory, creates a Program Group called Total Recorder, installs a driver, and sets it as the default device for both playback and recording.

2. After installing Total Recorder, you must restart Windows.

Tip: Create a shortcut to Total Recorder and place it on your desktop. This gives you single-click access to Total Recorder.

Installing/Uninstalling the Total Recorder Driver Manually

If you experience problems with the automatic installation or uninstallation of the Total Recorder driver, you can install/uninstall this driver manually as described below. Otherwise, skip to the section "[Configuring Total Recorder overview](#)".

You need to install a virtual driver so that Total Recorder is able to record as well as play. This process is similar to that used for installing a sound card driver. The procedure you use depends on the version of Windows you are running.

Installing the Driver Manually - Windows 95, Windows 98 or Windows ME

Use the following procedure.

1. Select "Start"- "Settings"- "Control Panel".
2. Click "Add New Hardware".
3. **For Windows 95:** Answer "No" to the question "Do you want Windows to search for your new hardware?"

For Windows 98/ME: Select "No - I want to select the hardware from a list" to the prompt "Windows can search for hardware that is not Plug and Play compatible or select from a list".

4. Select "Sound, video and game controllers" from the list of Hardware types.
5. Click "Have disk" instead of choosing from the list of manufacturers and models.
6. Point to the directory you selected during the installation of Total Recorder (where DrvTR95.inf resides).
7. There will only be one driver entry in this .inf file - Wave sound driver for the Total Recorder, and it will be selected by default. Click "OK" or press Enter.
8. After clicking the "Finish" button, wait patiently for a wizard dialog window to disappear. It may take about one minute.

Installing the Driver Manually - Windows NT 4.0

Use the following procedure.

1. Select "Start"- "Settings"- "Control Panel".
2. Click "Multimedia".
3. Select the "Devices" tab.
4. Click "Add".
5. Click "Unlisted or Updated driver" from the list of manufacturers and models.
6. Point to the directory you selected during the installation of Total Recorder (where oemsetup.inf resides).
7. There will only be one driver entry in this directory - Wave sound driver for the Total Recorder, and it will be selected by default. Click "OK" or press Enter.

8. After the installation is complete, reboot your computer.

Installing the Driver Manually - Windows 2000

Use the following procedure.

1. Select "Start"- "Settings"- "Control Panel".
2. Click "Add/Remove Hardware".
3. Click "Next" to continue.
4. Select "Add/Troubleshoot a device" and click "Next".
5. Select "Add a new device" and click "Next".
6. Select "No, I want to select the hardware from a list" and click "Next".
7. Select "Sound, video and game controllers" and click "Next".
8. Click "Have disk" instead of choosing from the list of manufacturers and models.
9. Point to the directory you selected during the installation of Total Recorder (where oemsetup.inf resides).
10. There will only be one driver entry in this directory - Wave sound driver for the Total Recorder, and it will be selected by default. Click "Next".
11. Click "Next" again. A "Digital Signature Not Found" dialog appears.
12. Click "Yes". A "Files Needed" dialog appears.
13. Enter the same name as in step 9.
14. Click "Finish".
15. Close all applications and reboot your computer.

Installing the Driver Manually - Windows XP

Use the following procedure.

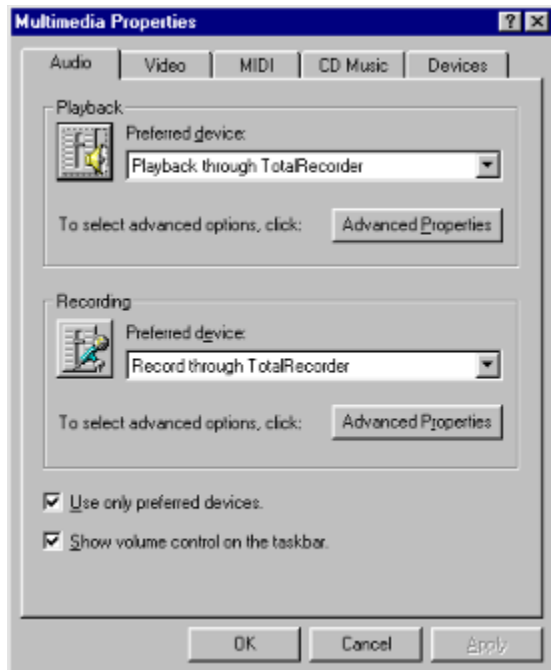
1. Select "Start"- "Control Panel".
2. Click "Add Hardware".
3. Click "Next" to continue.
4. Select "Yes, I have already connected the hardware" and click "Next".
5. Select "Add a new hardware device" (at the bottom of the list) and click "Next".
6. Select "Install the hardware that I manually select from a list (Advanced)" and click "Next".
7. Select "Sound, video and game controllers" and click "Next".
8. Click "Have disk" instead of choosing from the list of manufacturers and models.

9. Point to the directory you selected during the installation of Total Recorder (where oemsetup.inf resides).
10. There will only be one driver entry in this directory – the Wave sound driver for Total Recorder, and it will be selected by default. Click "Next".
11. Click "Next" again. A "Hardware Installation" dialog appears with the warning that the software has not passed Windows Logo testing.
12. Click "Continue Anyway". A "Files Needed" dialog appears.
13. Enter the same name as in step 9.
14. Click "Finish".
15. Close all applications and reboot your computer.

Setting Preferred Devices

After installing the virtual device driver manually, you must set this device as your default.

1. Select "Start"- "Settings"- "Control Panel" (for Windows XP select "Start"- "Control Panel").
2. Select "Multimedia" (for Windows ME, Windows 2000 - "Sounds and Multimedia", for Windows XP - "Sounds and Audio Devices") and click the "Audio" tab.
3. Review the "Preferred device" list in the "Playback" section. Write down the name of the default device and then proceed to the next step. **Important:** This information is required if you uninstall Total Recorder.
4. Select the "Playback through Total Recorder" entry.
5. Review the "Preferred device" list in the "Recording" section. Write down the name of the default device and then proceed to the next step. **Important:** This information is required if you uninstall Total Recorder.
6. Select the "Record through Total Recorder" entry.



7. You should also check the "Use preferred devices only" box (or "Use only preferred devices").

Uninstalling the Driver Manually - Windows 95, Windows 98, or Windows ME

Take the following steps.

1. Select "Start"- "Settings"- "Control Panel".
2. Select "System" and click the "Device Manager" tab.
3. Select "Sound, video and game controllers".
4. Highlight "Wave sound driver for the Total Recorder".
5. Click "Remove".
6. Close all applications and reboot your computer.
7. Verify that your preferred playback and recording devices are set correctly. You can use the Windows system dialog ("Start"- "Settings"- "Control Panel" (for Windows XP "Start"- "Control Panel"), "Multimedia", or "Sounds and Multimedia", or "Sounds and Audio Devices", "Audio tab"), or use the Total Recorder menu items ("Options"- "System settings"), and select the devices that were set before the installation of Total Recorder.

Uninstalling the Driver Manually - Windows NT

Take the following steps.

1. Select "Start"- "Settings"- "Control Panel".
2. Click "Multimedia".

3. Select the "Devices" tab.
4. Select "Audio Devices".
5. Highlight "Audio for Wave sound driver for the Total Recorder".
6. Click "Remove".
7. Close all applications and reboot your computer.
8. Verify that your preferred playback and recording devices are set correctly. You can use the Windows system dialog ("Start"- "Settings"- "Control Panel", "Multimedia", "Audio" tab), or use the Total Recorder menu items ("Options"- "System settings"), and select the devices that were set before the installation of Total Recorder.

Uninstalling the Driver Manually - Windows 2000

Take the following steps for **Windows 2000**. Note that only a manually installed driver can be removed manually.

1. Select "Start"- "Settings"- "Control Panel".
2. Click "Add/Remove Hardware".
3. Click "Next" to continue.
4. Select "Uninstall/Unplug a device" and click "Next".
5. Select "Uninstall a device" and click "Next".
6. Select "Wave sound driver for the Total Recorder" and click "Next".
7. Select "Yes, I want to uninstall this device" and click "Next".
8. Click "Finish".
9. Close all applications and reboot your computer.
10. Verify that your preferred playback and recording devices are set correctly. You can use the Windows system dialog ("Start"- "Settings"- "Control Panel", "Sounds and Multimedia", "Audio" tab), or use the Total Recorder menu items ("Options"- "System settings"), and select the devices that were set before the installation of Total Recorder.

Uninstalling the Driver Manually - Windows XP

Take the following steps for **Windows XP**. Note that only a manually installed driver can be removed manually.

1. Select "Start"- "Control Panel".
2. Click "Sounds and Audio Devices".
3. Select the "Hardware" tab.
4. Select "Wave sound driver for the TotalRecorder" and click "Properties".
5. Select the "Driver" tab.


6. Click "Uninstall". A "Confirm Device Removal" dialog appears.
7. Click "OK".
8. Click "OK" in the "Sounds and Audio Devices Properties" dialog.
9. Close all applications and reboot your computer.
10. Verify that your preferred playback and recording devices are set correctly. You can use the Windows system dialog ("Start"- "Control Panel", "Sounds and Audio Devices", "Audio" tab), or use the Total Recorder menu items ("Options"- "System settings"), and select the devices that were set before the installation of Total Recorder.

Configuring Total Recorder overview

The configuration program allows you to set the following:

- suppression of system sounds
- preferred playback and recording devices
- priority of Total Recorder program
- directory for temporary files
- default directory
- action for making a new recording over a previous one
- split mode settings (Professional and Developer Editions only)
- file name generation rules (Professional and Developer Editions only)
- resampling algorithm
- external programs for MP3 encoding
- default format (RIFF-WAVE or MP3) and ID3 tags (ID3v1 and ID3v2) for MP3 files
- a default tag for Ogg Vorbis files
- pre-recording parameters
- debug mode for driver.

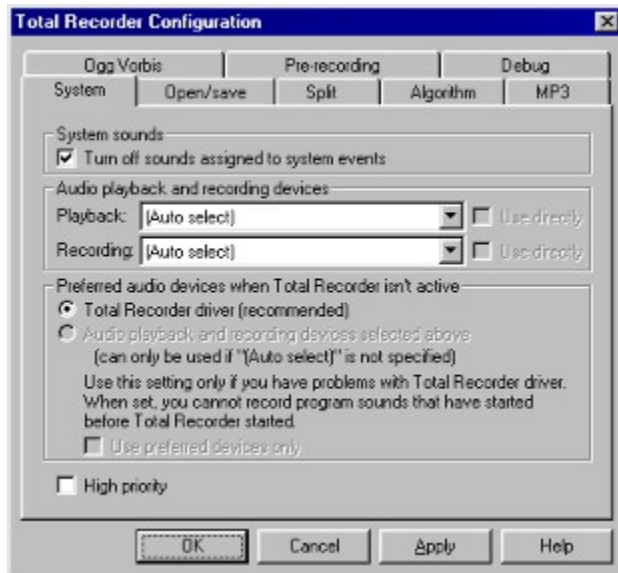
To configure Total Recorder:

1. Start the Total Recorder program.
2. Either select “Options”- “Settings” or click the  button on the Main toolbar. You are presented with a dialog box with the following tabs:

Tab	Use this tab to set options for ...
<u>System</u>	System sounds, audio playback and recording devices, preferred audio devices when Total Recorder isn't active, priority of Total Recorder program
<u>Open/save</u>	Folder for temporary files, default Open/SaveAs folder, action for making new recording over previous one
<u>Split (Professional and Developer Editions only)</u>	Split mode parameters, file name generation rules
<u>Algorithm</u>	Frequency conversion algorithm
<u>MP3</u>	Program for encoding to MP3, header format, ID3 tags
<u>Ogg Vorbis</u>	Default tag for Ogg Vorbis files
<u>Pre-recording</u>	Number of seconds to pre-record, activate pre-recording mode
<u>Debug</u>	Trace file, internal debug information

Using the System Tab

The dialog looks like this:



Each of the configuration options is described below.

System sounds

To prevent system sounds from interrupting your recording, check "Turn off sounds assigned to system events". This is the default and the recommended setting. Your system sounds will return when you close Total Recorder.

Audio playback and recording devices

These devices are the names of the real drivers used for playback and recording. This is where Total Recorder redirects its input and output sound streams. The installation program automatically sets these values according to your current system settings and usually you do not need to change them.

Use directly

The "Use directly" check box can be used for Playback and Recording. If this option is set, Total Recorder plays back/records sound bypassing its own driver.

Setting this option may be useful if you experience problems with the Total Recorder driver.

Setting the "Use directly" option for a playback device lets you play back sound using Total Recorder and other sound programs (e.g. screen reader) simultaneously if your sound board allows multi-streaming playback. You can also have two instances of Total Recorder running. While one instance of Total Recorder records in accelerated recording mode, another (with the flag enabled) can play sound data.

If the device is set to "(Auto select)" then the "Use directly" check boxes are disabled.

Preferred audio devices when Total Recorder isn't active

This identifies the use of the Total Recorder driver. You can choose from the following:

Total Recorder driver (recommended) - does not change the preferred devices for playback and recording. The Total Recorder installation program sets the Total Recorder driver as the preferred device (i.e. "Playback through TotalRecorder" and "Record through TotalRecorder"). This driver works all the time and passes sound through it regardless of Total Recorder being active. This is normally transparent to the user.

Audio playback and recording devices selected above – this is recommended if the Total Recorder driver conflicts with some other programs and the conflict cannot be resolved by reconfiguring those programs. For more information, refer to the "Sound system or playback programs not working properly" section. In this mode, Total Recorder sets its driver as a preferred device when it starts and your specified real drivers (not Auto Select) when you exit.

In this mode, Total Recorder cannot record sound that starts before it was started. You must start Total Recorder before your playback program.

Use preferred devices only - this flag should only be used if you have selected "Audio playback and recording devices selected above". Select the value that will be set when Total Recorder exits. It is always on when Total Recorder is active.

High priority

Selecting this option raises the priority of the Total Recorder program. Because sound recording is a real-time process, any interruption can lead to skips, clicks, gaps, etc. This setting helps eliminate these problems and provides cleaner recordings.

Using the Open/Save Tab

The dialog looks like this:



Each of the configuration options is described below.

Folder for temporary files

The size of recording files can be quite large. Because of this, Total Recorder saves recorded information, not in memory, but in a temporary file. You can specify the directory for this file, if you wish.

When you first start the Total Recorder program, it sets the directory for temporary files based on the following:

- If the system environment variable TMP exists, it uses its value.
- Else, if the TEMP system environment variable exists, it uses its value.
- Otherwise, it uses the directory where the program is installed.

It is recommended that you store temporary files on the same hard drive where you will save your recordings. Otherwise, a full copy operation will be required and this will be time consuming for large files.

It is not recommended that you store temporary files on a compressed drive. If the folder for temporary files is on a compressed NTFS drive, then you should remove compression from the folder.

Flush the temporary file every *nn* seconds

This option causes the operating system to write data to your hard drive every *nn* seconds, instead of keeping it in the processor's cache. If this mode is set and your computer shuts down, or restarts abnormally, your sound recording can be found in the folder for temporary files with a file name of ~TRr1.wav|mp3 (~TRr2.wav|mp3, ~TRr3.wav|mp3, ...).

Setting this mode can sometimes result in sound defects, such as clicks or gaps, when making long recordings from some soundboards. For more information, refer to the section "Troubleshooting, Symptom - Sound recorded with gaps, Possible Cause #4".

It is not recommended that you change the default flush value of 5 seconds.

Default Open/SaveAs folder

When you first start Total Recorder, the default directory for opening and saving files is the directory from which the Total Recorder program was started. Subsequently, Total Recorder can use the previously used directory as the default (select "Last used folder") or you can specify the default directory yourself (select "This folder" and specify the location).

Action for making new recording over previous one


You can select one of the following options to specify the action to take when you attempt to record over an existing recording:

Delete the old one without confirmation – Clicking the "Record" button overwrites and destroys the previous recording unless it has not yet been saved (in full) to a file.


Save the old one with confirmation, if not saved – similar to the above, but if the recording has not been saved, you are prompted to save it. Recording does not start until you respond.


Append/Insert – a new recording is appended to, or inserted into, an existing recording regardless of it being saved. Insert mode is available only with the Professional and Developer Editions.

Note:

If you want to create a new file, you must explicitly select "New" from the "File" menu or click the  button in the main toolbar. Sound parameters (i.e. sample rate, mono/stereo, 8bit/16bit) are always inherited from the recording. Even if different parameters are set in the "Recording source and parameters" dialog they will not be in effect unless you implicitly create a new file. This note refers to all modes except for split mode.

Notes for Professional and Developer Editions Users:

You can switch between Append and Insert modes using the "Play/Record" menu ("Append recording mode" and "Insert recording mode" items), or by clicking the appropriate button ( for append mode,

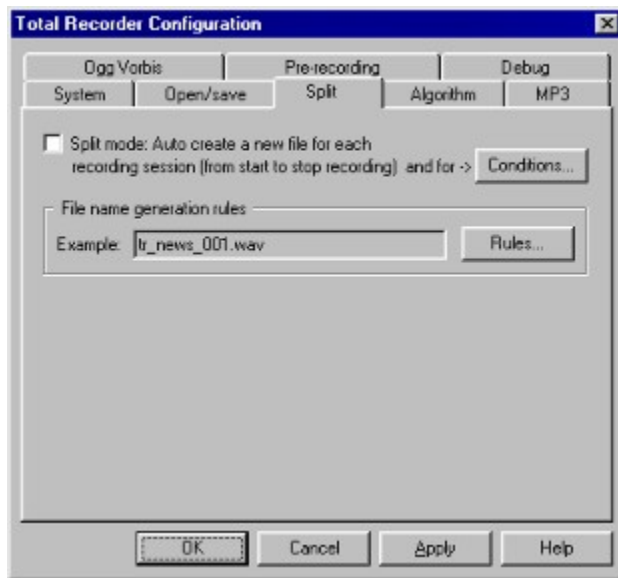
 for insert mode). If either the "Delete the old one without confirmation" or "Save the old one with confirmation, if not saved" mode is set, then you cannot switch between Append and Insert modes.

Turning on split mode causes the "Save the old one with confirmation, if not saved" option to be set automatically.

A recording is not considered saved unless it was saved in full; partial recordings are not considered saved files.

Using the Split Tab (Professional and Developer Editions only)

This dialog lets you set split mode parameters and file name generation rules. It looks like this:



Split mode

Select the “Split mode” check box to activate split mode. Setting this mode causes a new file to be created for each recording session (from start to stop).

Turning on split mode causes the "Save the old one with confirmation, if not saved" option to be automatically set.

Conditions

You can specify additional conditions for creating new files during a recording by pressing the "Conditions..." button. For more information, refer to the ["Split mode overview"](#).

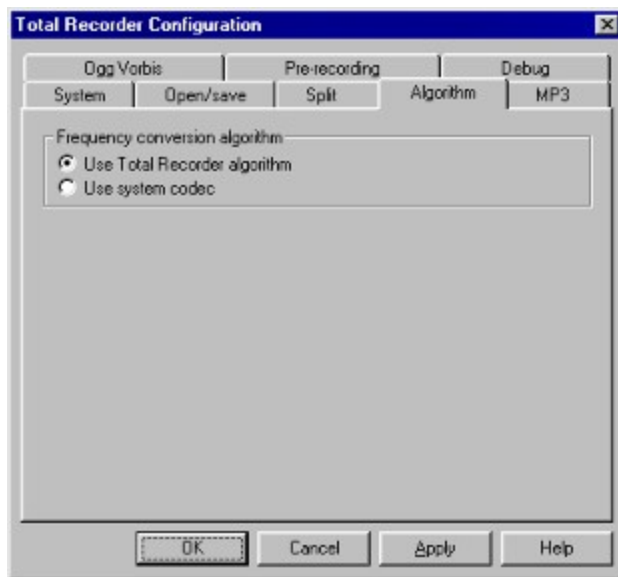
File name generation rules

Created files initially have names generated on the basis of rules specified in the "File names generation rules" dialog. You can customize these names using the “Rules” button and selecting various options.

An example of such a file name is TR_new_album_001.wav. For more information, refer to the ["Specifying File Names Generation Rules"](#) section.

Using the Algorithm Tab

This dialog lets you set the frequency conversion algorithm and looks like this:



Frequency conversion algorithm

Select one of the following:

Use Total Recorder algorithm – use Total Recorder’s internal algorithm. This is the default and recommended value. It provides a reasonable compromise between speed and quality.

Use system codec – in most cases, this is Microsoft PCM Converter. It is very fast but the quality may be unacceptable.

Using the MP3 Tab

Use this tab if you plan to use Total Recorder with MP3 format. Before working with this dialog, you should review "[Working with MP3 Format](#)".

The dialog looks like this:



Each of the configuration options is described below.

Select program for encoding to MP3

You can select from the following:

Unable to encode Mpeg Layer 3 – this item is the first in the list if there is no MP3 codec installed on your system. If you select this item, Total Recorder will not be able to create MP3 files and "MPEG Layer 3: press F1 to get help" appears in the list of sound formats. You can use F1 to display some links to find MP3 encoders.

[Default codec] – this item is the first in the list if there is at least one MP3 codec on your system. If you select this item, Total Recorder relies on the system to select an appropriate codec.

(Name of a particular codec) – one of these entries appears for each MP3 codec in the system. You can select any codec from the list. Normally there is only one MP3 codec installed, in which case you can either select it here or select [Default codec] as above.

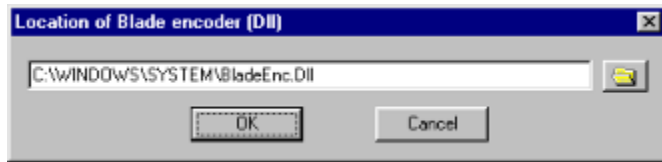
Blade encoder (dll) – use BladeEnc.dll to encode to MP3. Total Recorder will show this item regardless of whether this DLL exists on your system. However, you can only save this setting if you provide a full path to BladeEnc.dll in the Location field.

Lame encoder (dll) – use Lame_Enc.dll to encode to MP3. Total Recorder will show this item regardless of whether this DLL exists on your system. However, you can only save this setting if you provide a full path to Lame_Enc.dll in the Location field.

Location

This identifies the full path for the external encoding program. Total Recorder will locate the

program itself if it is in one of the PATH directories. Otherwise, click Change and enter the location. For example:



Version

Total Recorder checks the version of the external program. Some older versions are not supported, in which case an error message appears and you will need to download a newer version.

Flags

MP3 frame headers contain different flags. Note, that setting a flag is available only for encoding using dll. You can select from the following.

Copyright – the flag indicating whether the audio is copyrighted.

Private – may be freely used for specific needs.

Original – the flag indicating whether the audio is original media.

For stereo mode

MP3 format supports different versions of encoding stereo audio signals. When Total Recorder displays a dialog for selecting a format, it only includes mono or stereo. If stereo is specified, it will be encoded according to the mode selected in this tab.

You can select from the following, although some modes may not be available for some encoding programs:

Stereo – each channel is encoded separately but not necessarily the equal amount of space is allocated for each channel. For example, the encoding program may allocate a larger part to one channel based on the actual content of the sound stream.

Joint stereo – both channels are encoded together. The average of the two channels is calculated and encoded. The difference between channels is also encoded but with a lower bit rate. This method saves some space but the quality may suffer. This mode is not recommended for high-quality recordings with high bit rates (i.e. more than 192 kbit/sec.).

Dual channel – each channel is encoded separately and independently. This is recommended where the content is not actually a stereo recording but two independent sound streams.

Quality

You can select the desired quality if the encoding program allows it. The better the quality you select, the slower the encoding will be.

File type

You can select the desired header format for MP3 files – either RIFF-WAV (WAV-MP3) or "pure"

MP3. Click the Change button to change this setting. You can override this default value when you save a recording but it requires a full copy of the file.

ID3 tag

You can add an ID3 tags (ID3v1, ID3v2 or both) to pure MP3 files but not to RIFF-WAV files. These tags can contain such information as the artist name, the album, etc. You can click the Change button to set a default. For more information, refer to the "[Using the MP3 properties dialog](#)".

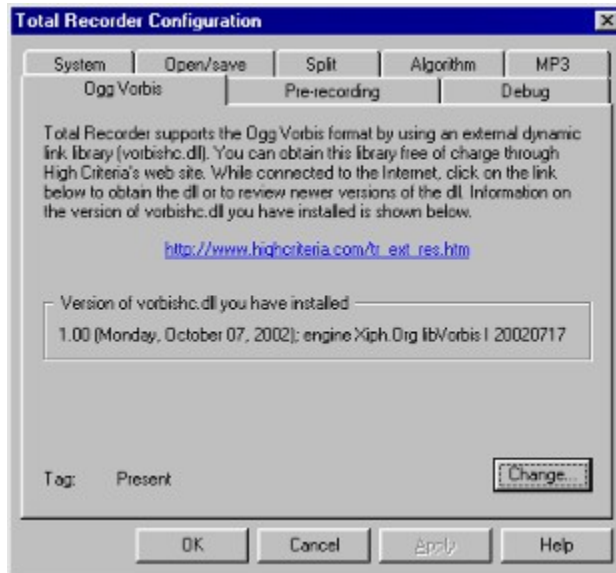
You can override this default value when you save a recording. For the ID3v1 tag, it is fast and does not require a full copy. Changing the ID3v2 tag may require a full copy of the file.

Note: The ID3v1 tag is completely supported. For the ID3v2 tag, only Version 2.3 and below is supported.

Using the Ogg Vorbis Tab

Use this tab if you plan to use Total Recorder with Ogg Vorbis format. You can set a default tag for Ogg Vorbis files, and review the version of the Ogg Vorbis support library (vorbishc.dll) that you have installed. Before working with this dialog, you should review "[Working with Ogg Vorbis Format](#)".

The dialog looks like this:



The dialog displays the version of the Ogg Vorbis support library (vorbishc.dll) that is currently installed. If vorbishc.dll is not installed, an appropriate message is displayed.

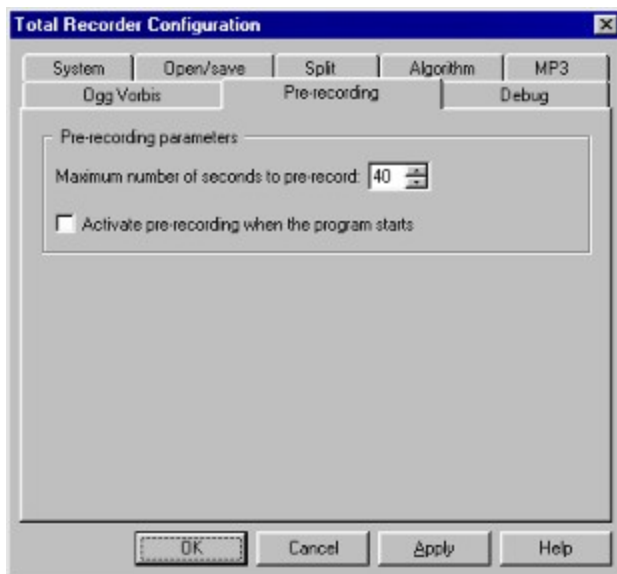
Tag

You can add a tag to Ogg Vorbis files. Each tag consists of Main fields and Other fields, and can contain such information as the artist name, the album, etc. You can click the Change button to set a default tag for your recordings. You can override these defaults when you save a recording, however, changing a tag requires a full copy of the file.

For more information, refer to the "[Working with Ogg Vorbis Tag](#)" section.

Using the Pre-recording Tab

The dialog looks like this:



Each of the configuration options is described below.

Maximum number of seconds to pre-record

You can specify the maximum number of seconds to be pre-recorded in the box to the right.

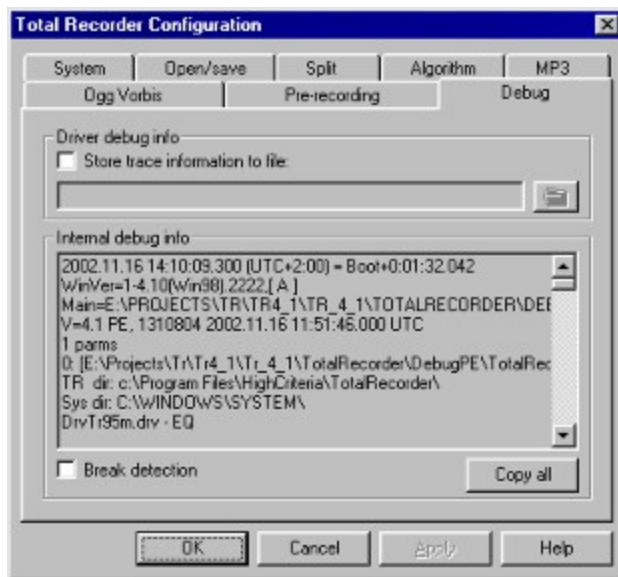
Activate pre-recording when the program starts

When this box is checked, pre-recording mode activates automatically when Total Recorder starts.

For more information on pre-recording mode, refer to the "[Pre-recording mode overview](#)" section.

Using the Debug Tab

The dialog looks like this:



Store trace information to file

Use this option only when advised by Technical Support. Selecting this option will result in additional overhead on your system.

Internal debug info

This box contains debug information that will help High Criteria's Technical Support staff diagnose a problem. If you experience a problem with Total Recorder that requires Technical Support, you should take the following steps:

1. Use the "Copy all" button to copy the information to the Clipboard, immediately after the problem appears. The size of the data never exceeds 20 kilobytes.
2. You can then paste the information from the Clipboard into your correspondence with Technical Support.

It may be necessary for you to reproduce the problem in order to capture the debug information.

If you need to contact Technical Support because a box appears with an error message, you can copy the internal debug information, as follows:

1. Press the "Debug info>>" button in the error message box.
2. Use the Copy button to copy the debug information to the Clipboard.
3. You can then paste the information from the Clipboard into your correspondence with Technical Support.

Break detection

Use this option only when advised by Technical Support. Selecting this option will result in additional overhead on your system.

How to obtain a registration key

After installing and verifying the program works properly, you should obtain a registration key from High Criteria. If the program is unregistered then your recordings are limited to 40 seconds each and you can use the scheduler only as an alarm.

Note: You cannot use your Version 1.x or 2.x registration key with Version 4.1. The registration key for Version 3.0 and later is valid for Version 4.1 (Standard Edition). The registration key for Version 4.0 is valid for Version 4.1 (Professional Edition). Registration keys for all previous versions of Developer Edition are not valid for Developer Edition Version 4.1.

To register Total Recorder:

1. Receive the registration key.

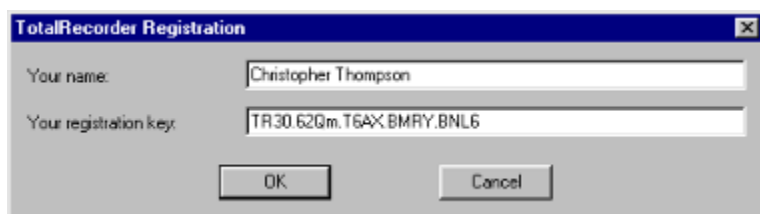
For registered users of versions 1.0 or 2.x Standard Edition and version 3.x Developer Edition. All registered users are entitled to a free registration key for the same edition. It is sent automatically by E-mail unless you specified that you do not want to receive E-mails from High Criteria or you have not provided your E-mail address. If you are a registered user wishing to upgrade, and you did not get your registration key, use [the self-service registration key management system](#) or contact support@HighCriteria.com.

OR

For new users and for registered users of Standard Edition wishing to upgrade to Professional Edition. Follow the instructions given on High Criteria Inc.'s web site at the following address: <http://www.highcriteria.com/products.htm>.

To order by check, refer to the Registration.txt file in the installation folder of Total Recorder.

2. Select "Help" - "Registration". Type in the same name you used to obtain the registration key and type your registration key. Note that after registration this menu item is not accessible.



The image shows a screenshot of a Windows-style dialog box titled "TotalRecorder Registration". It contains two text input fields. The first field is labeled "Your name:" and contains the text "Christopher Thompson". The second field is labeled "Your registration key:" and contains the alphanumeric string "TR30 62Qm.T6AX.BMRY.BNL6". At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

How to uninstall Total Recorder

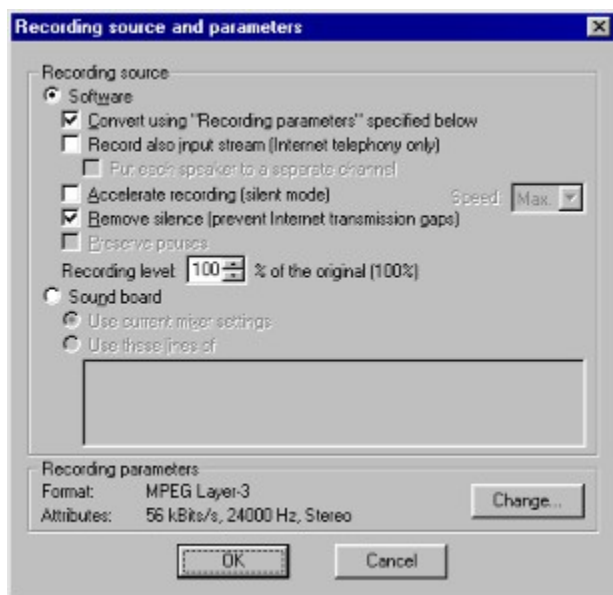
To uninstall Total Recorder, use "Start"- "Settings"- "Control Panel" (for Windows XP use "Start"- "Control Panel"), "Add/Remove Programs". The Total Recorder driver remains in memory until you reboot.

Setting Recording Parameters

Before you begin recording, use the "Recording source and parameters" dialog to set your recording parameters. These parameters are saved for subsequent use. Changing parameters after a recording is finished affects only subsequent recordings. Total Recorder can convert already recorded sound when saving it.

When you schedule recordings using Total Recorder's built in scheduler, you can use different parameters for each job using the "Schedule Item" dialog.

Click the "Recording source and parameters" button, or from the "Options" menu, select "Recording source and parameters". You are presented with the following dialog:



Recording source

Select one of the following (mutually exclusive) sound sources:

- **Software** – capture and record sound played back or requested by other computer programs. This feature is unique to Total Recorder and is not available from the vast majority of other sound recording programs.
- **Sound board** – record sound digitized by a sound card. This includes a microphone, CD or other input lines.

Additional parameters for source "Software"

If you select "Software", you can specify the following:

- **Convert using "Recording parameters" specified below** – convert the recorded sound to a format specified in the "Recording parameters" area.

If this is not selected, the recorded sound will be in the original format (i.e. the format of sound being sent to the soundboard). If different parts of the sound have different formats then only the longest part will be recorded.

- **Record also input stream (Internet telephony only)** – capture and record input

sound streams, requested by programs from the soundboard. This applies only to the recording of Internet telephony conversations.

- **Put each speaker to a separate channel** – special mode for Internet-telephony only. You can set this option only if you have selected the "Record also input stream" check box above. This creates a stereo file where one voice is in one channel and the other voice is in another channel.

If "Put each speaker to a separate channel" is not set, the voices of both speakers are mixed in one channel.

Note: In version 3.0 and below, this mode was referred to as "Make Stereo".

- **Accelerate recording (silent mode)** - the Total Recorder driver makes the playback program generate sound with a faster speed and suppresses the actual sound. Not all playback programs are compatible with this mode. For more information, refer to the "[Accelerated Recording overview](#)" section. If you select this option you must use the "Speed" pull-down menu to select the desired speed.
- **Speed: Max.** – Total Recorder tries to make the playback program play at maximum speed. This is recommended for converting a sound file from a non-standard format to a standard format.
- **Speed: a value** – set a particular speed. Total Recorder tries to make the playback program play a specified number of times faster than normal. For example, you can set this speed to "4" to cause the playback program to play 4 times as fast as normal. This setting is recommended if the maximum speed is not possible (e.g. when recording from the Internet).
- **Remove silence (prevent Internet transmission gaps)** - Total Recorder tries to fix Internet transmission gaps. During the playback of an Internet transmission, failures of a short duration can occur. These are often due to an insufficient speed of data transfer and appear as pauses and replications during playback. When using some audio programs, such as Windows Media Player and Real Player, these pauses and replications can also appear in the recording. With the "Remove silence" mode turned on, Total Recorder removes pauses and replications from recording.
- Notes:
 - This mode does not guarantee sound repair. The benefit you will see depends strongly on the characteristics of the gaps.
 - It is very unlikely a recording will worsen when recording with this mode on.
 - If you forget to turn this mode on before you start a recording, you can later play back the recording with one instance of Total Recorder and record the sound with another instance of Total Recorder that has the "Remove silence" mode turned on. You can use accelerated recording mode in this case.
 - The "[Properties](#)" part of [Total Recorder's main window](#) displays the size of data without taking into account this mode. It displays the size of data passed to the soundboard. After a recording stops, the data size changes to reflect the size of actual data written to the file. If you see the data size become less after a recording has stopped, then some fixing of sound has taken place.
- **Preserve pauses** - If this mode is set, Total Recorder records silence even if nothing is

being played back by any software, or playback is paused. This mode requires you to set "Convert using parameters specified below". You cannot use this option with the following: "Record also input stream", "Accelerate recording" and "Remove silence".

- **Recording level: XX % of the original (100%)** – Total Recorder increases or decreases the level of recorded sound relative to the level of the original sound. Use this setting to adjust the level of recording if you know in advance that the level of original sound is too low or too high. Unlike the normalization feature, the sound level is changed during the recording stage and is not restricted to PCM target format.

Additional parameters for source "Sound board"

If you select "Sound board", you can specify the following:

- **Use current mixer settings** – use current system settings. Normally, they can be viewed or changed from the standard mixer by double clicking on the "Volume Control" icon in the system tray.
- **Use these lines of ...** (the full name of this check box depends on the sound driver of the sound board) – points explicitly to lines that are switched on during recording. At least one line has to be specified. After a recording is finished, the original mixer settings are restored.

Using Different Settings

The following explains some different settings:

- If you select "Software" as the Recording source and PCM is specified, the conversion algorithm depends on the value selected under the Algorithm Tab. See the "[Using the Algorithm Tab](#)" section.
- If you select "Software" as the Recording source and a compressed format is specified (non-PCM), the compression will be performed either with a selected codec or (for MP3 only) with an external program. See the "[Using the MP3 Tab](#)" section.
- If you select "Sound board" as the Recording source and PCM is specified, no conversion is needed. The sound board will produce the required format.
- If you select "Sound board" as the Recording source and a compressed format is specified (non-PCM), the closest PCM format will be requested from a sound board and compressed.

Any necessary conversions are normally done on the fly (i.e. as the recording is being made). If a conversion requires too much time and cannot complete during the recording, it will continue after the recording is finished. Refer to the "[Long Operations](#)" section.

Recording parameters

Use this section of the dialog box to set recording parameters. To change the format click the "Change" button. The "Sound format selection" dialog appears. For more details, refer to [Using the Sound format selection Dialog](#).

- Notes:
 - For formats other than [Ogg Vorbis](#): If a recording is performed over, appended to, or inserted into a previous recording or a file, then recording parameters are inherited

from the sound format of the previous recording/file.

- For Ogg Vorbis format: If a recording is performed over, appended to, or inserted into a previous recording, or a file, with Ogg Vorbis format, the results depend upon the bit rates, as shown below.

Source File Parameters

VBR with bit rates xxx-yyy kbit/s

CBR with bit rate xxx kbit/s

ABR with bit rate xxx kbit/s and current recording parameters are ABR with bit rate xxx kbit/s

ABR with bit rate xxx kbit/s and current recording parameters are NOT ABR with bit rate xxx kbit/s

Actual Recording Parameters

VBR with bit rates xxx-yyy kbit/s

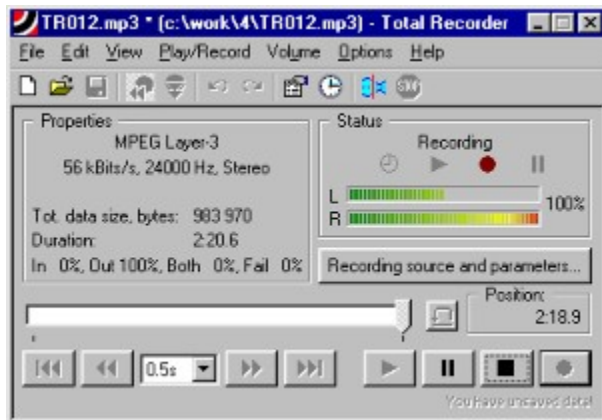
CBR with bit rate xxx kbit/s

ABR with bit rate xxx kbit/s

Quality setting with quality that corresponds to bit rate of xxx kbit/s






The Total Recorder dialog overview







The Total Recorder dialog is made up of different parts, as shown below:



Main toolbar

This toolbar allows you easy access to common operations. You can use the following buttons:

Button	Edition	Description	Menu Item	Shortcut
	All	Create a new sound file	File – New	Ctrl+N
	All	Open an existing sound file	File – Open	Ctrl+O
	All	Save an open file using the same file name	File – Save	Ctrl+S
	PE, DE	Switch recording mode to append	Play/Record – Append recording mode	None
	PE, DE	Switch recording mode to insert	Play/Record – Insert recording mode	None

	All	Undo previous operation	Edit – Undo	Ctrl+Z
	All	Redo the previously undone action	Edit – Redo	Shift+Z
	All	Activate "Settings" dialog	Options – Settings	None
	All	Work with scheduled jobs	Options – Schedule	None
	PE, DE	Split current recording	Play/Record – Split now	Ctrl+I
	All	Interrupt automatic work	Play/Record – Interrupt work	None

Properties

This part of the dialog displays information about the current file being played or recorded. See [Properties group description](#) for details.

Status

This part of the dialog displays the current status of Total Recorder. See [Status group description](#) for details.

"Recording source and parameters" button

This button displays a dialog for the recording source and parameters. For more information on this dialog, refer to the [Setting recording parameters](#).

During recording or pre-recording, you can use this dialog only to view recording parameters. Recording parameters must be set in advance.

Slider

In playing mode, the slider reflects which part of the sound file has been played back. You can move the slider backwards and forwards.

In recording mode, the slider position depends on the current recording mode - Overwrite, Append or Insert.

"Jump to time" button ()

This button activates the "Jump to time" dialog. You can use this dialog to quickly navigate to a position within a recording. For more information, refer to the ["Jump to time dialog description"](#) section.

To use this feature, you can also use the Ctrl+J shortcut or choose the "Play/Record" - "Jump to time..." menu item.









Position


This part of the dialog's display depends on different modes, as described below:


Mode	What is Displayed
Playing	Current position in file
Recording with split mode off	Slider position in current recording
Recording with split mode on	Duration of current file

Main Buttons

You can use the following buttons:

Button	Edition	Description	Menu Item	Shortcut
	All	Rewind to the beginning	Play/Record – To Start	None
	All	Left (one step)	Play/Record – Left by nn.n sec.	Ctrl+L
	All	Right (one step)	Play/Record – Right by nn.n sec.	Ctrl+T
	All	Fast forward to the end	Play/Record – To End	None
	All	Play	Play/Record – Play	Ctrl+Y
	All	Pause/Continue	Play/Record – Pause/Continue	Ctrl+U
	All	Stop	Play/Record – Stop	Ctrl+P
	All	Record	Play/Record – Record	Ctrl+R

Between the  and

 buttons is a list for selecting the step that these buttons use to position your recording. The step is specified in units of time, ranging from 1/10 of a second (0.1s) to 15 minutes (15m). To quickly decrease or increase the step, you can use the Ctrl+< or Ctrl+> shortcuts, respectively.

Properties group description

This part of the Total Recorder dialog displays information about the current file being played or recorded. For example:



MPEG Layer-3 – format name.

320kBit/s; 48,000Hz; Stereo – format parameters.

The line below these format parameters is normally empty but may contain a message such as "xx.x sec. of other formats lost". This message appears only in Software mode and only when the output format is not specified. If this is the case, and the recorded sound contains several fragments with different characteristics, only the longest fragment is kept and all others are lost.

Data size, bytes – size of recorded data in the recording/playing file. This does not include the length of the non-data part. You can display the full length by selecting “File”, “Properties”.

Duration - playback time in seconds.

In split mode:

- The "Data size, bytes" field is renamed to "Tot. data size, bytes".
- The "Tot. data size, bytes" and "Duration" fields display information about the total size and time (from start of recording), rather than the size and duration of the current file.

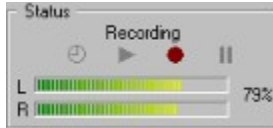
In xx%, Out xx%, Both xx%, Fail xx% - this information appears only when you record. The display varies depending on the recording activity.

Recording Activity	Display
Sound being played back	Out 100%
Internet telephone conversation in full-duplex mode	Both 100%, since sound is transmitted back and forth simultaneously
Internet telephone conversation in half-duplex mode	In - % of time the user of the given computer talked Out - % of time the remote partner talked
From microphone, CD or other input line	In 100%
Internet telephone conversation in full-duplex mode, different format for input and output sounds	Fail 100%

Note: This data relates only to the last recording session and not to the entire file.

Status group description

This part of the dialog displays the current status of Total Recorder. The possible values are: "Playing", "Paused Playing", "Recording", "Paused Recording", "Auto playing until hh:mm:ss", and "Auto recording until hh:mm:ss". Values can include information related to pre-recording.



Some further explanations follow.

"Auto" - recording or playback was started by the scheduler or from the command line, or auto stop is on. The time (hh:mm:ss) is the time that the job will complete. You cannot control the job other than cancel it by clicking on the "STOP" button on the Main toolbar, or by selecting "Interrupt work" from the "Play/Record" menu. Other controls, such as "Pause" are disabled. You can cancel Auto stop by selecting "Play/Record"- "Auto stop recording".

xx.x sec. pre-recorded - indicates the number of pre-recorded seconds. This number is limited by the value you specify in the "Pre-recording parameters" dialog. This information is displayed only if pre-recording mode is on.

Clock icon - indicates that a scheduled job is currently in progress, or Auto Stop is on. It does not relate to the fact that some jobs are scheduled.

Level indicators - reflect the amplitude of the signal for the left and right channels during recording and playback. When recording from "Software" the "reactivity" depends on the size of the playback program's internal buffer. For some programs this can be changed once per second or even more often.

Level percent - reflects the maximum amplitude of the signal for the left and right channels during the previous second of recording or playback. Professional Edition users can use values obtained during test recordings to set parameters for split mode recording based on the level of sound.

Jump to time dialog

This dialog can be activated by clicking the “Jump to time” button (🕒), using the Ctrl+J shortcut, or with the “Play/Record” - “Jump to time...” menu item. You can use this dialog to quickly position within a recording.



To jump to a position:

1. Specify the position using either the HH:MM:SS.d field or set values in the hr. (hours), min. (minutes), sec. (seconds), and 1/10th sec. (10ths of seconds) fields.
2. Click the Jump button.

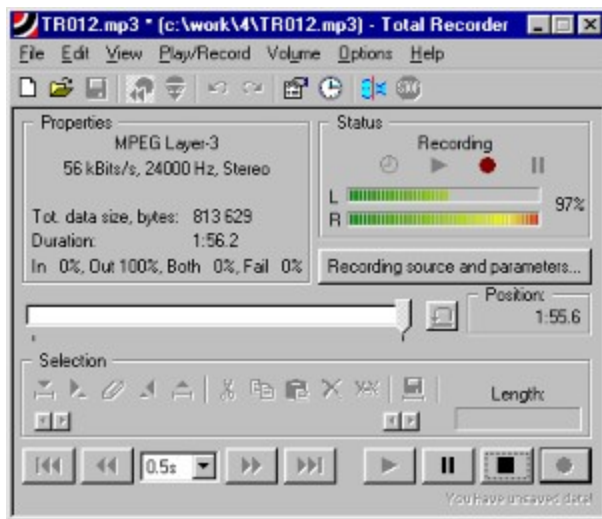
Using the Selection Panel

The Selection panel lets you select a fragment of sound data and perform one of the following operations:

- save it to a file
- delete it
- copy it to the Clipboard
- other operations, as described below.

The Selection panel below the slider is not visible by default in the Standard Edition. Select “View”, “Show selection” from the menu to turn on/off the Selection panel.

Here is the main dialog with the Selection panel displayed:














The following are some characteristics of the Selection panel:

- The buttons that control each selection boundary show the position in seconds.
- The current position of each selection boundary is controlled by a different group of buttons. You can position selection boundaries with 0.1-second accuracy.

Selection Panel Buttons

You can use the following buttons on the Selection panel:

Button	Editio n	Description	Menu Item	Shortcut
	All	Set left selection boundary to current slider position	Edit – Selection – Set beginning of selection	Shift+L
	All	Move current position of slider to left selection boundary	Edit – Selection – Go to beginning of selection	L

	All	Toggle selection off	Edit – Selection – Toggle selection off	Ctrl+Shift+C
	All	Move current position of slider to right selection boundary	Edit – Selection – Go to end of selection	R
	All	Set right selection boundary to current slider position	Edit – Selection – Set end of selection	Shift+R
	All	Precise positioning of selection boundaries. The selection boundary moves 0.1 second left and right. The main slider's position does not change.	Edit – Selection – Shift beginning/end of selection left/right by 0.1s	Shift+M Shift+N Shift+S Shift+T
	PE, DE	Delete selection and place it on Clipboard	Edit – Cut	Ctrl+X
	PE, DE	Copy selection to Clipboard	Edit – Copy	Ctrl+C
	PE, DE	Paste data from Clipboard to current recording	Edit – Paste	Ctrl+V
	PE, DE	Delete selection	Edit – Delete selection	Delete
	PE, DE	Delete data except what is selected	Edit – Delete except selection	Ctrl+Delete
	All	Save selection to specified file	File – Save selection as...	None
	All	Stop playing at nearest selection boundary	Edit – Stop playing at selection boundary	P

To select the entire sound data, select "Edit"–"Selection"–"Select All" or press Ctrl+A.

For more information on using the Selection panel for editing sound data, refer to the ["Editing a Sound File"](#) section.

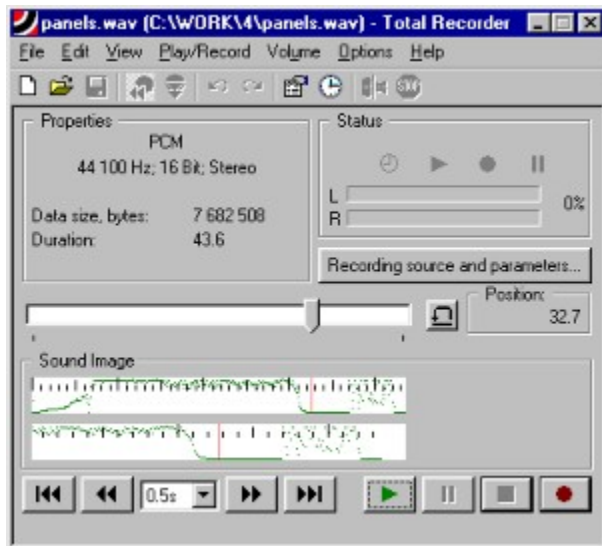
Length

This part of the Selection panel displays the length (in seconds) of the current selection.

Working with Sound Images (Professional and Developer Editions Only)

The Sound Image panel provides a visual representation of the characteristics of sound data. This panel can be activated/deactivated using the “View”->“Show sound image” menu item.

Here is the main dialog with the Sound Image panel displayed:



The Sound Image panel has two images: a small-scale image (at the top) and a large-scale image (at the bottom).

Small-scale image

This image represents the entire sound data. The graduation scale depends upon the amount of sound data. A red, vertical line shows the current position. A green point represents the level of sound at that point. You can click on any point in the image to navigate to the corresponding position in the sound file.

Large-scale image

This image uses a larger scale (i.e. each line represents 1 second), and shows sound data to the left and right of the current position. A red, vertical line is always located at the center of the image. A green point represents the level of sound at that point. You can click on any point in the image to navigate to the corresponding position in the sound file.

Using the Sound Image panel

You can use the Sound Image panel to locate bits of silence between songs. On the small-scale image, these parts will be represented with green points that are close to the zero level. Click somewhere within this group of points. You can adjust the current position using the large-scale image below. As you move your mouse cursor over an image, the corresponding position in the recording appears to the right.

Note: It is recommended you display this panel only when necessary. If you work with the Sound Image panel displayed, then opening a file, or editing a recording, causes the sound image to be recalculated, and could take a long time.

Recording overview

In order to record all of the sound generated from a software program, you should start the recording before starting the playback's program. Every playback program sends information to a driver with some delay, usually several seconds. If you start recording when sound has already played back, it will look as if nothing happens for several seconds and then the indicators will show the real beginning of the recording.

For information on using the built-in scheduler or command line to schedule a recording, refer to the section "[Using a Scheduler overview](#)".

For information on recording using "Software accelerated recording/converting", refer to the section "[Accelerated Recording overview](#)".

For information on using pre-recording mode, refer to the section "[Pre-recording mode overview](#)".

Starting Recording

Before you begin recording, set your recording source and other parameters if these have not been set as you require. Click the "Recording source and parameters" button or select "Recording source and parameters" from the "Options" menu. Refer to "[Setting Recording Parameters](#)".

To start recording, either click the "Record" button (●), select Record from the "Play/Record" menu, or press Ctrl-R.

As soon as your recording starts, the message "You have unsaved data!" appears under the "Record" button. This is to remind you that data is being written to a temporary file. If you want to store the output permanently, you must save the data once your recording is complete.


If you try to make a new recording before saving the previous one, the result depends on the "Action on new recording over the previous one" setting and the recording mode (Append or Insert). For more information, refer to the "[Using the Open/Save Tab](#)".

If "Software" is selected as a source, a sound is recorded only when some program reproduces or requests it. After starting the "Record" feature, the corresponding indicator on the "Status" panel becomes highlighted. This indicates Total Recorder is ready to record but the real recording process does not start until Total Recorder receives some sound from another program. If the level indicators do not become green, there is no data to record.

If "Sound board" is selected as a source, the recording size remains at zero until sound data, that is not absolute silence, is received from the soundboard. The level indicators reflect this. When such sound data is received, the silence is included in the recording and reflected in the recording size displayed. If no source sends real sound to the soundboard, Total Recorder may receive non-silent sound from a particular soundboard line based on the following:

- soundboard characteristics
- level of recording
- type of input line. For example, non-silent sound will more likely be received from a microphone line than from "line-in",
- sound format parameters. For example, it is very likely that non-silent sound will be received in the case of 16-bit sound format but not in the case of 8-bit sound format.

Interrupting a Recording

To temporarily interrupt recording, either use the "Pause/Continue" button (), select "Pause" from the "Play/Record" menu, or use Ctrl-U. To continue a paused recording, either use the "Pause/Continue" button again, select "Continue" from the "Play/Record" menu, or use Ctrl-U.

If "Software" is selected as a source, all information during a pause will be written to a temporary file. This allows a recording to continue immediately after the pause is finished. Remaining in "pause" for a long time may take a lot of your hard disk space and is therefore not recommended.

Stopping a Recording

To stop recording, use the "Stop" button (■), select "Stop" from the "Play/Record" menu, or use Ctrl-P.

You can use the "Undo" (↶) and "Redo" (↷) buttons to undo and redo your last recording.

Saving a Recording

To save a recorded sound stream to a file, use "Save" or "Save As" on the "File" menu, or press Ctrl-S. The file is saved as a .wav, a .mp3 or a .ogg file.

If you save over an existing file, the resultant file format is:


- the same format of the source file, if you use "Save"
- the specified format, if you use "Save As".

A recording is not considered saved unless it was saved in full. This affects the actions taken when you are about to overwrite a recording.

If your recording was performed in split mode, the recording is saved immediately after it has stopped.

Saving Part of a Recording

You can also select and save only part of a recording by taking the following steps:

1. Make the Selection panel visible. If it is not visible, select "View", "Show selection" from the menu.
2. Select the left and right boundaries by moving the slider and marking the left and right selection boundaries. For more information, refer to the "Using the Selection Panel" section earlier in this document. You can set selection boundaries during recording and then slightly reposition them. You cannot set selection boundaries when recording in split mode.
3. Save your selection. Use the  button in the Selection group, or select "File", "Save selection as" from the menu.

Saving Multiple Recording Fragments

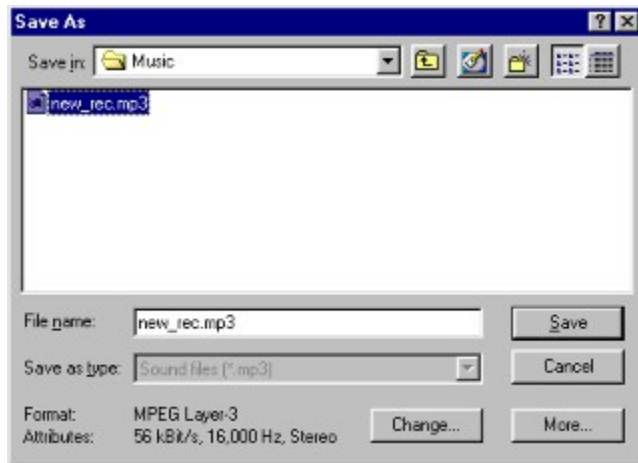
You can save multiple recording fragments as different files. The size of a .wav file cannot exceed 4GB. This is an internal limitation of the WAVE format. If the size of your recording is greater than 4GB, you can either divide it into smaller parts or convert it to a lower quality.

Saving a Recording in a Different Format

You can save your recording in a format different from the original, however it may take a significant amount of time.

To change the format, take the following steps:

1. Choose the "Save As" dialog.



2. Click "Change" and select a format. For more information, refer to the "[Using the Sound format selection Dialog](#)" section.
3. If you select MP3 or Ogg Vorbis format, you can click "More" and change the default file type and ID3 tags for MP3 and tag for Ogg Vorbis. For more information, see the "[Using the MP3 properties Dialog](#)" and "[Working with Ogg Vorbis tag](#)" sections. Changing a file type requires a full file copy but deleting, adding or editing the ID3v1 tag does not. Adding or removing the ID3v2 tag requires a full file copy; editing the ID3v2 tag may require a full file copy. Adding, removing, or editing an Ogg Vorbis tag requires a full file copy.
4. Enter the name of the new file, if you haven't already done so. The default extension is .wav, .mp3 or .ogg depending on the selected format. You cannot manually specify an extension.
5. Click "Save" to save your recording.

Using Fast Save

Beginning with Version 3.0, Total Recorder writes a ready-to-use wav or mp3 file without saving an intermediate working file. A save operation usually just renames (moves) the working file and is almost instantaneous regardless of the file size. However, the following situations will prevent this and require copying of the entire file.

- The file is being saved to a different drive, either physical or logical, than the drive that stores the working file. Use "Options"- "Settings", "Open/save" tab to change the location of the working file.
- The file format changes.
- The header type changes from RIFF-WAV to MP3 or vice versa.
- The file is being normalized.
- The existing file was appended with new data, new data was inserted, or the file was edited.
- Adding or removing the ID3v2 tag. Editing the ID3v2 tag may require a full file copy.
- Adding, removing, or editing an Ogg Vorbis tag requires a full file copy.

Note that changing the ID3v1 tag does not prevent a fast save operation.

Using Auto Stop Mode

When Total Recorder is recording, you can specify time when the recording will stop. You can set or reset the auto stop mode by selecting "Auto stop recording" from the "Play/Record" menu. The following dialog appears:



Stop recording at – when this box is checked, Auto Stop is on. You can then use the fields to the right to specify a time:

Time (hours, minutes, seconds) – set the time to stop the recording.

Now – display the current time. This is useful when you want to use a relative time such as 5 minutes from now.

Advanced (Professional and Developer Editions only) – activates the "Advanced stop recording conditions" dialog. Here you can set additional options for automatically stopping a recording. For more information, refer to "[Using the Advanced stop recording conditions Dialog](#)" section.

Save recording to file – the file name where the recording will be saved. This field is mandatory except for recordings in split mode. If recording is in split mode, the field is disabled and the file name is automatically generated based on your file name generation rules (see the "[Specifying File Name Generation Rules](#)" section).

Normalize to – check this box to normalize before saving, and then use the box to the right to specify a percentage. This is enabled only for PCM format. For more information, see [Normalizing a Sound File](#). Normalization is not possible if split mode is on.

Quit Total Recorder after job completes – Total Recorder will close after the recording stops.

When auto stop is active, all other controls are disabled. The behavior is similar to that of a scheduled job (see [Actions you can take during a Scheduled Job](#)). The only difference is that you can cancel the auto stop by selecting "Play/Record" - "Auto stop recording" again, and turning off the "Stop recording at" box so that the recording will continue in regular mode. Any error messages are not displayed but are written to the Total Recorder Log (see [Handling Errors and Other Problems](#)).

Accelerated Recording overview

Software accelerated recording (silent mode) lets you convert sound files of different formats to standard wave format. This is normally done at a fraction of the time required to play the file. Total Recorder suppresses playback, makes the sound stream go through the driver with an above normal speed, and records it.

The playback program switches to a different mode only when the new sound stream starts. When using accelerated mode you must switch on record first and then start playing the sound back.

You cannot use accelerated recording mode and pre-recording mode at the same time.

When using accelerated mode you cannot hear any sound but the slider of the playback program moves faster than normal. Total Recorder also shows the recording moves by the following:

- the indicator of the current position moves faster than normal
- the level indicators change from being empty to green.

Accelerated Recording compatibility

Since the playback program has to work faster than was intended, some programs are not compatible with this mode. They will either work with normal speed or some error may occur (e.g. some fragments may be lost or repeated more than once, or some extra pauses or noises may be inserted). Different versions of the same program may behave differently.

This document does not provide a list of compatible and incompatible programs. The simpler the playback program the more likely it will work correctly in accelerated mode. Programs that synchronize sound with some other events such as games or video players will not likely work in accelerated mode.

The maximum possible speed may also vary. This usually depends on some internal parameters of a playback program, which are not documented and are not configurable, because normally they do not matter.

Through experimentation, you can determine both the compatibility of a particular program with accelerated mode and the optimal speed. Make your recording then listen to it. If there is no problem, or a problem that can be easily corrected with a selective save, you may use the accelerated mode. Otherwise, you can lower the speed. If this doesn't help you can either use regular recording or change your playback program.

If a program plays a sound from a hard disk or a local area network and it allows accelerated mode, it will probably allow maximum speed. However, there are some exceptions. If the program plays a sound from the Internet, it is usually impossible because the sound driver will request the information faster than the connection supplies. In this case, you can manually adjust the speed based on the available bandwidth. If the connection is either very slow or bad, try to set the speed below normal.

Pre-recording mode overview

Sometimes when listening to an audio program (e.g. Internet transmission), you do not know exactly when to start recording. With previous versions of Total Recorder, you could either record sound continuously or start your recording when you hear the part in which you are interested. Each case has its own problems. Either you would likely end up with a large file, where you would need to remove large amounts of unwanted sound, or you would miss essential data.

Using Total Recorder's pre-recording mode, a pre-specified amount of sound is stored internally. When you start your actual recording, the pre-recorded sound is added to the beginning of your recording and the storing of information in an internal buffer stops. If you were to start and stop a recording multiple times, where the number of seconds stopped each time is less than your specified pre-recording time, then your resultant recording will be the same as that obtained by an ordinary uninterrupted recording (see concerns when appending to a recording).

For more information on using pre-recording mode, refer to the "Using Pre-recording Mode".

Note:

You cannot use pre-recording when "Accelerated recording" mode is on. For more information on "Accelerated recording" mode, refer to the "Accelerated Recording overview" section.

Using Pre-recording Mode



To set pre-recording parameters, use "Options"- "Settings", "Pre-recording" tab. For more information, see "[Using the Pre-recording Tab](#)" section.

To turn pre-recording mode on or off, use the "Pre-recording xxx last seconds" menu item from the "[Play/Record](#)" menu. You can also use the Ctrl+G shortcut. The actual number of seconds specified on the "Pre-recording" tab is displayed in the menu item name.

To clear the pre-recording buffer, use the "Clear pre-recording buffer" menu item from the "[Play/Record](#)" menu. You can also use the Ctrl+B shortcut. You may want to clear the pre-recording buffer if you do not wish to include pre-recorded sound in your recording. The pre-recording buffer can be cleared if it is not empty.

If Total Recorder starts to perform a scheduled job or starts with command line parameters, pre-recording mode will not be turned on at program start regardless of the "Activate pre-recording when the program starts" setting.

When pre-recording mode is on, the following takes place:

- a message appears in the "[Status](#)" part of [Total Recorder's main window](#) that indicates the number of actual pre-recorded seconds (e.g. "xx.x sec. pre-recorded").
- the record notification picture  changes to , if there is no actual recording.
- the "Pre-recording xxx last seconds" menu item changes.
- the level indicators display the level of pre-recorded sound.

For pre-recording mode overview, refer to the section "[Pre-recording mode overview](#)".

Caution:

Pre-recording uses computer hardware resources. This mode should only be used when necessary.

Note:

When you record and pre-record using compressed (non-PCM) format, a gap may appear in your recording at the point when you switch from recording mode to pre-recording mode.

Editing a Sound File


The Professional and Developer Editions of Total Recorder have built-in sound editing capabilities. For more information on working with the Selection panel, see "[Using the Selection Panel](#)".

Using the Clipboard (Professional and Developer Editions only)

Total Recorder supports standard Windows Clipboard functionality. You can copy, cut and paste fragments of a recording within Total Recorder and between Total Recorder and other applications that support the Windows Clipboard.

Copying a Fragment

To copy a fragment:

1. Select the fragment.
2. Click the  button, or select "Edit" – "Copy" on the Selection panel.


Cutting a Fragment

To cut a fragment:

1. Select the fragment.
2. Click the  button, or select "Edit" – "Cut" on the Selection panel.

Pasting a Fragment


To paste a fragment from the Clipboard:

1. Use the Slider to set the current position.
2. Click the  button on the Selection panel, or select "Edit" – "Paste".

If the parameters of a fragment are different from the parameters of the current sound data, the fragment is converted using the parameters of the current sound data.

Saving a Fragment to a File

You can save part of your recording as a separate file by taking the following steps:

1. Select the desired fragment.
2. Click the  button on the Selection panel.
3. Choose a file name using the standard "Save As" dialog.

Inserting a Sound File (Professional and Developer Editions only)

You can insert a sound file anywhere in your recording by taking the following steps:


1. Use the Slider to set the current position.

2. From the "Edit" menu, select "Insert a File at Current Position".
3. Choose the file name using the standard dialog.

If the parameters of an inserted file are different from the parameters of the open file, the inserted fragment is converted using the parameters of the open file.


Deleting a Fragment (Professional and Developer Editions only)

You can delete part of your recording by taking the following steps:


1. Select the desired fragment.
2. Click the  button on the Selection panel.

Deleting Data Except for a Fragment (Professional and Developer Editions only)

You can delete parts of your recording except for a selected fragment by taking the following steps:

1. Select the fragment you want to keep.
2. Click the  button on the Selection panel. All data is deleted except for the fragment.

Undoing the Previous Operation

To undo an operation, click the  button on the main toolbar. Note that you cannot undo an operation once a file is saved.

The Redo  button on the Main toolbar reverses Undo.

The Undo buffer stores all selection operations (e.g. set beginning of selection), normalization operations, recording operations, and editing operations. The Undo buffer is cleared after saving the current file.

The Undo and Redo actions for the Standard Edition apply only to the operations that are available in the Standard Edition.

Playing a Sound File

To play a sound file, click the "Play" button (▶), select "Play" from the "Play/Record" menu, or press Ctrl-Y. Total Recorder starts to play the recording from the current position or from the beginning if the current position is set to the end of the file.

For information on using the built-in scheduler or command line to schedule a playback, refer to the section "[Using a Scheduler overview](#)".

Pausing the Playback

To interrupt the playing of a sound file, click the "Pause/Continue" button (||), select "Pause" from the "Play/Record" menu, or press Ctrl-U. To resume a paused playing, click the "Pause/Continue" button, select "Continue" from the "Play/Record" menu, or press Ctrl-U.

Moving Within a File

You can use the slider to move forward or backward in a sound file. You can also use the rewind button ⏮ to go to the beginning and the rewind button

⏭ to go to the end. Additionally, you can move right or left with a fixed step using the ⏪ and ⏩ buttons or their keyboard equivalents (Ctrl-L - left, Ctrl-T - right). There is a drop-down list for selecting the step between the ⏪ and ⏩ buttons.

Stopping

To stop playing, use the "Stop" button (■), select "Stop" from the "Play/Record" menu, or use Ctrl-P.

Playing a Selection

You can play a selection by selecting "Play selection" from the "Play/Record" menu or by using Ctrl-E.

See also: [Working With Sound Image \(Professional and Developer Editions Only\)](#)

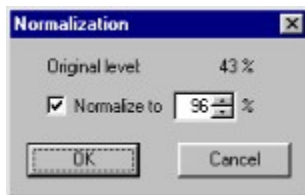
Normalizing a Sound File

Normalizing is a process of increasing the sound level (loudness) so that the amplitude of the loudest parts is close to the maximum allowed for a given sound format. Because it also increases the level of noise, normalizing should only be used if there is no other way to adjust the volume. For example, you should not use normalizing with Sound Board mode recording because you can always adjust the level using a mixer.

Only a non-compressed file (PCM format) can be normalized.

To normalize a sound file, take the following steps:

1. Select "Volume"- "Normalize" from the main menu. The "Normalization" dialog appears, as shown below.



2. Select the level of normalization in percentage. The default is 100%. If you plan to later transform your sound file (to compress it, for example), it is recommended you set this value to 80-90% to avoid overflowing.
3. Click "OK".

The normalization process is fully reversible. You can set any value and go back to the original.

In rare cases, you may need to set the normalization percentage greater than 100. For example, you can improve a recording if the average level is low but there are a couple of peaks (e.g. noise).

After edit/recording operations the normalization value is discarded.

You can use the "Undo" () and "Redo" (

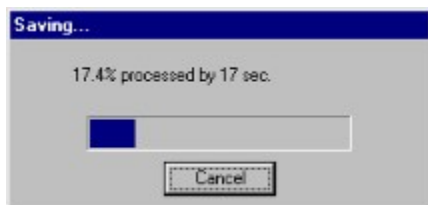
) buttons to undo and redo the last normalization.

Long Operations

The following operations may take a significant amount of time:

- Saving a file, if fast saving is not possible.
- Inserting from a file or the Clipboard.
- Finishing "on the fly" conversion, if it was not possible in real time.
- Calculating the maximum amplitude for normalization.
- Calculating the sound image.

A dialog, similar to the following, appears during long operations:



Stopping a Long Operation

To stop an operation, click "Cancel" and reply to the confirmation. The result depends on the operation:

- **Saving a file** – stops and erases the part of the file that has already been written.
- **Converting format** – stops and the converted part of the file is saved.
- **Normalization** – the Normalization dialog is hidden.
- **Calculating the sound image** – the Sound Image panel is hidden.

Working with MP3 Format

Total Recorder does not have a built-in compression/decompression engine for any sound format, including MP3. Total Recorder can only play and record a compressed file if the appropriate audio codecs are installed.

Using Codecs

An audio codec is a special program (driver) that converts sound formats. When a codec is registered (installed) it can be used by any audio processing application. Each version of Windows includes a basic set of codecs. Users can also download, or buy and install, additional codecs. Starting with version 3.0, Total Recorder can use codecs installed in your system.

There are different types of codecs that support MP3. A simple codec can only decode MP3 and is sufficient for playing MP3 files. However, to create an MP3 file you need a codec that supports encoding. A codec that only supports encoding for low bit rates is included in some versions of Windows (e.g. Windows 98 and Windows ME). This is sufficient for recording radio broadcasts but not for CD-quality music. You can buy codecs that support higher bit rates.

Using DLLs

Total Recorder can also use a DLL (dynamic link library) dedicated to MP3, either BladeEnc.dll or Lame_Enc.dll. Unlike codecs, neither one of these DLLs can decode an MP3 file, which means that Total Recorder may be able to record but not play MP3 files. If you use one of these DLLs, it is recommended that you also install a decoding-only codec to enable both playing and recording of MP3 files.

Selecting an MP3 Encoder

MP3 encoders, including codecs, BladeEnc.dll, and Lame_Enc.dll, differ in price, speed and quality. Select the one you find most suitable.

Types of MP3 Format

Total Recorder can play and record MP3 files in either WAV or MP3 format. The difference is in the file header.

WAV-format files have a standard RIFF-WAVE header. These files usually have a .wav extension. As long as an appropriate codec is installed and recognized, any playback program can play them.

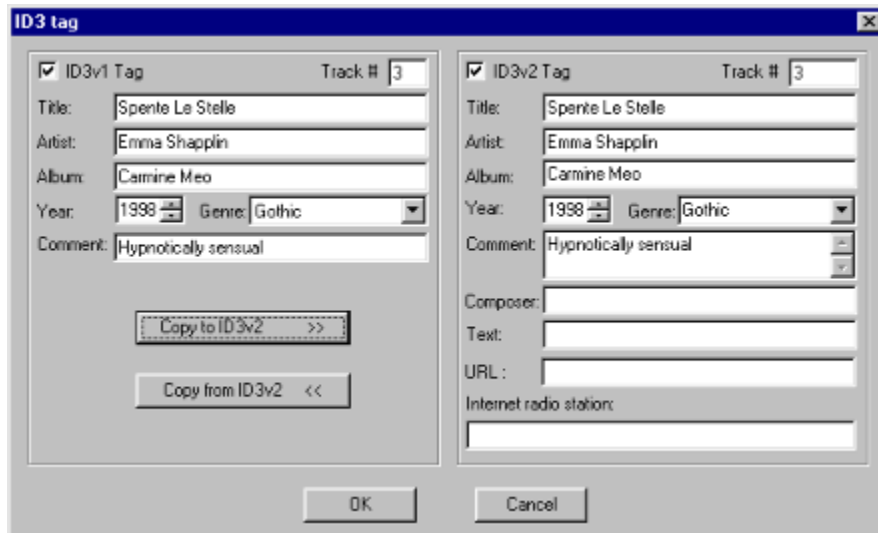
Pure MP3-format files do not contain any special headers but may contain an ID3 tag. These files usually have a .mp3 extension. To play this type of file, you need a program that can decode MP3 format.

Setting MP3 Parameters

You set parameters relating to MP3 on the "MP3" tab of the configuration dialog. For more information, see [Using the MP3 Tab](#).

Using the MP3 properties Dialog

Total Recorder lets you record MP3 files as WAV-MP3 files, with a standard RIFF-WAVE header, or "pure" MP3 files. For pure MP3 files, you can also create ID3 tags (ID3v1, ID3v2, or both) that contain information about the audio file.



You can invoke this dialog from different places. If you invoke it from the configuration dialog or saving dialog, you can change the File header type. If you invoke it from the "Tag" field of the "File" menu, only part of this dialog appears.

The "Tag" menu item is enabled for "pure" MP3 files only.

Note: The ID3v1 tag is completely supported. Only Version 2.3 and below of the ID3v2 tag is supported. An error message is issued if the file being opened has an unsupported version of the ID3v2 tag, the tag is not correct, or the tag cannot be read by Total Recorder for some other reason. In such cases, the only operation allowed is deletion.

Working with Ogg Vorbis Format

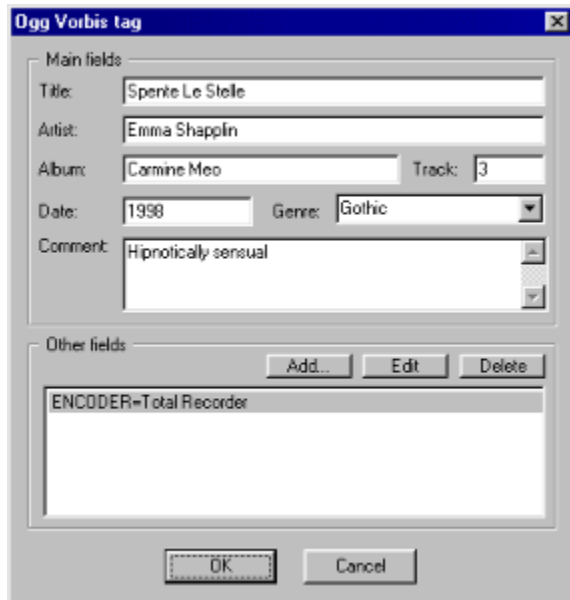
Total Recorder supports the Ogg Vorbis format by using an external dynamic link library named vorbishc.dll. You can obtain this library, free of charge, through High Criteria's web site. To add support for Ogg Vorbis to Total Recorder, or to review new versions of vorbishc.dll, go to the http://www.highcriteria.com/tr_ext_res.htm link and follow the instructions.

Setting Ogg Vorbis Parameters

You set parameters relating to Ogg Vorbis on the "Ogg Vorbis" tab of the configuration dialog. For more information, see [Using the Ogg Vorbis Tab](#).

Working with Ogg Vorbis tag

For an Ogg Vorbis file, you can create a tag that contains information about the audio file. A tag can contain many different fields. The dialog for adding, removing, and editing a tag looks like this:



This dialog can be invoked from different places. The dialog contains two parts:

- **Main fields** - includes fields that are considered significant
- **Other fields** – fields that are considered less significant. These can include any arbitrary tags.

There are three buttons you can use to work with these “Other fields”.

- **Add** – add new field
- **Edit** – edit existing field
- **Delete** – delete field.

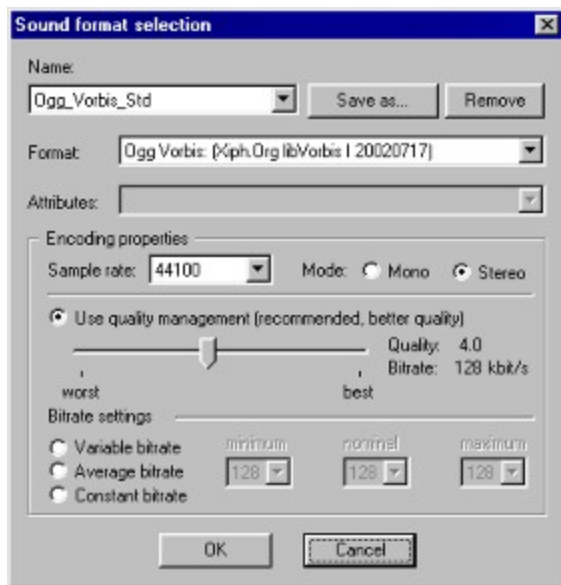
When you use the “Add” or “Edit” button, the following dialog appears.



Use this dialog to assign a Name and Value to the field.

Using the Sound format selection Dialog

The dialog looks like this:



Each of the fields is described below.

Name – list of named formats. You can select any format from the list. There are some system-named formats and you can name any format and save it for future use.

Save As – assign a name to the format and its attributes so it will appear in the "Name" list above.

Remove – remove a named format. Note that you cannot delete a system-named format.

Format – list of format types.

Notes:

- To record in MP3 format, you must have a fully functional codec (i.e. one that can encode and decode) or a special program. For more information, refer to the "[Working with MP3 format](#)" and "[Using the MP3 Tab](#)" sections.
- To record in Ogg Vorbis format, you must have the vorbishc.dll library. For more information, refer to the "[Working with Ogg Vorbis format](#)" and "[Using the Ogg Vorbis Tab](#)" sections.

Attributes – list of format parameters. This field is available for all formats except Ogg Vorbis.

Encoding properties– this group is for encoding in [Ogg Vorbis format](#).

Sample rate – encoding sample rate.

Mode – Mono or Stereo

Choose one of the encoding methods below. You can either select a method based on

quality (Use quality management) or based on the bit rate (variable, average, or constant).

Use quality management – sets a desired level of quality. This is the recommended setting. The approximate bit rate for the selected quality is shown to the right.

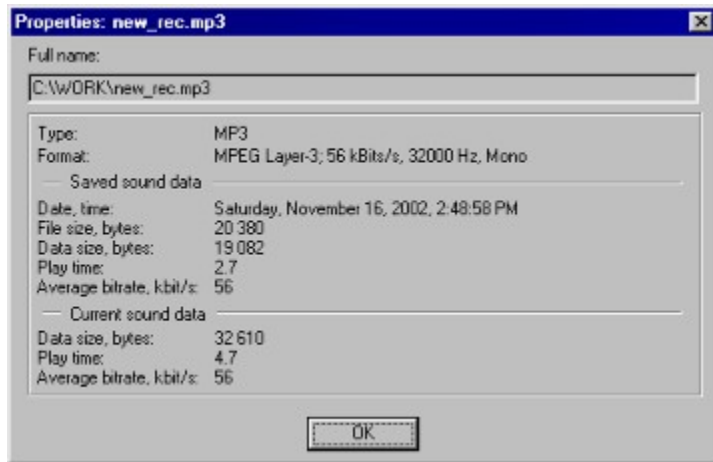
Variable bit rate – sets minimum and maximum bit rate boundaries for encoding. Data is encoded with various bit rates within these bounds.

Average bit rate – sets nominal bit rate for encoding. Data is encoded with various bit rates keeping to the nominal bit rate.

Constant bit rate – sets nominal bitrate for encoding. Data is encoded with a constant bit rate.

Displaying File and Recording Properties

You can display properties of a file and of a recording by selecting "File", "Properties". The following dialog appears:



Type – header type.

RIFF-WAVE – standard header. This type of file normally has a WAV extension.

MP3 – no header. This applies only for MPEG Layer 3 (MP3) files. This type of file normally has an MP3 extension.

Ogg Vorbis – This applies only for Ogg Vorbis files. This type of file has an OGG extension.

Format – format description. This indicates the format type (PCM – main, non-compressed format; all other formats are compressed) and format characteristics (e.g. frequency, number of channels, and other format-dependent parameters).

Saved sound data – this group relates to a disk file (i.e. the last saved version).

Date, time – date and time of the last modification.

File size – full size of file.

Data size – size of data in the file. This excludes headers and tags.

Play time – play time. This is an approximate time only and the accuracy depends on the compression and the particular codec.

Average bit rate – average bit rate, in kbit/s. This value indicates a degree of compression. A lower value corresponds to a higher level of compression.

Current sound data – this group relates to the current recording, which can contain both saved and unsaved data.

Data size – size of data in the file. This excludes headers and tags.

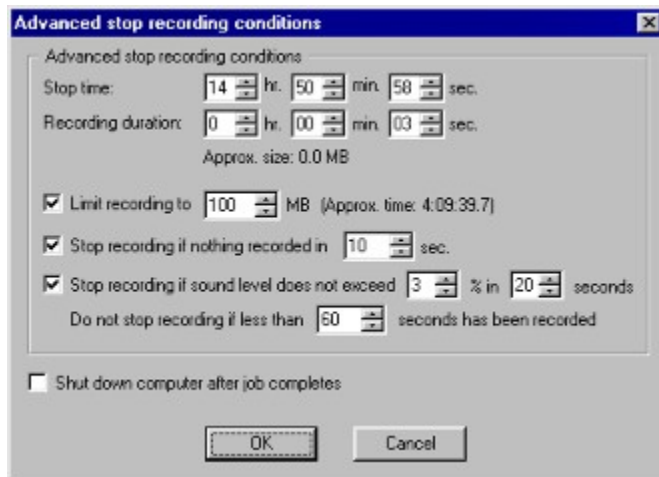
Play time – play time. This is an approximate time only and the accuracy depends on the compression and the particular codec.

Average bit rate – average bit rate, in kbit/s. This value indicates a degree of compression. A lower value corresponds to a higher level of compression.

Note: If you display the properties for Ogg Vorbis sound data, then additional information appears for each logical bitstream.

Using the Advanced stop recording conditions Dialog (Professional and Developer Editions only)

The "Advanced stop recording conditions" dialog is available from the "Auto stop recording" dialog (see ["Using Auto Stop Mode"](#)) and the "Schedule item" dialog (see ["Scheduling a Job"](#)). This dialog lets you specify conditions under which a recording will stop.



Stop time – the time to stop auto recording. This time reflects the Stop time setting in an upper-level dialog. Changing this time results in a change in the upper-level dialog and vice versa.

Recording duration – the time limit for recording. The value of duration is calculated on the basis of the start and stop times of the recording.

"Stop time" and "Recording duration" are related. Changing the value of one field causes change to the other. If recording is performed in split mode, the duration is the time limit for all the files that have been recorded.

Approx. size – displays the approximate size of the recording that has specified duration. If the recording format is unknown, then the field displays "Unknown".

Limit recording to – the size limit of the recording. If recording is performed in split mode, the limit is for all the files that have been recorded.

Approx. time – displays approximate duration of the recording that has specified size. If the recording format is unknown, then the field displays "Unknown".

Stop recording if nothing recorded in nnn sec. - if this option is enabled, recording will be stopped if nothing is recorded during a **nnn**-second period. Setting this option can be useful, for example, if you do not want the recording of an Internet transmission to continue after the Internet transmission has finished, or your connection to the Internet has been lost.

Stop recording if sound level does not exceed mmm % in nnn seconds.

Do not stop recording if less than kkk seconds has been recorded. - if this option is enabled, recording will be stopped if the recording level during an **nnn**-second interval is less than **mmm** % of the maximum sound level. This setting can be useful, for example, if you want to stop recording after a radio transmission ends and the Internet radio station transmits low-level noise. Or, for example, if you record from an audio cassette and want the recording to stop when the cassette ends. Setting the value of **kkk** seconds can help prevent a recording from stopping immediately (for example, if there is a delay when starting to play

an audio cassette).

Shut down computer after the job completes - if this option is enabled, your computer will be shut down after the job completes.

Specifying File Name Generation Rules (Professional and Developer Editions only)

You can use file name generation rules during a regular recording in split mode, and during a scheduled recording if the "Auto create file name" option is set. File name generation rules for a regular recording and for a scheduled recording are independent.

Take the following steps to display and set file name generation rules.

For a regular recording:

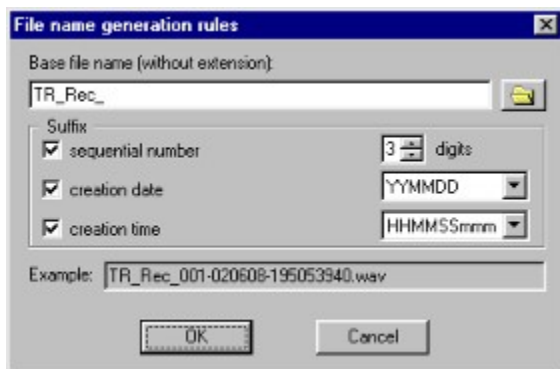
1. On the "Settings"-"Split" tab, press the "Rules..." button.
2. Set the required options on the "File name generation rules" dialog.

For recording during a scheduled job:

1. Select "Auto create file name" on the "Scheduled Item" dialog (see "Scheduling a Job" section).
2. Press the "Rules..." button.
3. Set the required options on the "File name generation rules" dialog.

Using the File name generation rules Dialog

The "File name generation rules" dialog looks like this:



A generated file name has the format: "Base file name" + "sequential number" + "creation date" + "creation time". Each part is optional.

For example, in the file name TR_Rec_001-020608-195053940:

- TR_Rec_ is the Base file name
- 001 is the sequential number (3 digits)
- 020608 is the creation date (June 8, 2002)
- 195053940 is the creation time (19:50:53:940).

Base file name – enter a prefix if you wish to have a prefix included in the file name. You can use both a file prefix without a path and a file prefix with a path (full or relative). If a full path is not specified, the current default directory is used (see "Configuring Total Recorder" –

"Using the Open/save Tab").

sequential number ... digits – select this option to include a sequential number in the file name. You can specify the number of digits in the sequential number using the “digits” field.

creation date – select this option to include the creation date in the file name. You can choose the date format: **YYMMDD** or **YYYYMMDD**.

creation time – select this option to include the creation time in the file name. You can choose a time format: **HHMMSS** or **HHMMSSmmm**.

Default Names in Split Mode

File name generation rules always apply in split mode. There are default rules for generating the names and you can choose to change these rules. The default rules are:

- Base name = “TR”
- Include sequential number = “No”
- Include creation date = “Yes” in YYYYMMDD format
- Include creation time = “Yes” in HHMMSS format.

For example, TR20020529-173508.wav represents a file created on May 29, 2002 at 17:35:08.

Split mode overview (Professional and Developer Editions only)

Setting split mode causes a new file to be created for each recording session (from start to stop). You can specify additional conditions for creating new files during a recording, or you can manually split a file. In split mode, files are actually saved immediately after recording has stopped, or a new file has been automatically created. In split mode, you must manually save a file if it was modified after your recording has been stopped.

Split mode can be set for both regular recording and for recording during a scheduled job. Split settings for regular and for scheduled recording are independent.

To activate and set split mode options, take the following steps.

For a regular recording:

1. Select the "Split mode" check box on the "Split" tab (see ["Using the Split Tab"](#) section).
2. Press the "Conditions..." button.
3. Set the required options on the "Split recording conditions" dialog (see ["Using the Split recording conditions Dialog"](#) section).


For a recording during a scheduled job:

1. To activate split mode recording during a scheduled job, select the "Split file according to the specified conditions" check box on the "Scheduled Item" dialog (see ["Scheduling a job"](#) section).
2. Press the "Conditions..." button.
3. Set the required options on the "Split recording conditions" dialog (see ["Using the Split recording conditions Dialog"](#) section).

Files that are created in split mode are initially named based on settings in the "File name generation rules" dialog. For more information on file name generation rules, refer to the ["Specifying File Name Generation Rules"](#) section.

Turning on split mode causes the "Save the old one with confirmation, if not saved" option to be set automatically (see ["Using the Open/Save Tab"](#)).

Using the “Split now” feature

The “Split now” feature lets you immediately split a file. You can use this feature by choosing the “Play/Record->Split now” menu item or by clicking the “Split now” () toolbar button. When you use “Split now”, the current file is closed and recording to a new file begins.

Note: You can use this feature only when you are recording in split mode.

Using the Split recording conditions Dialog (Professional and Developer Editions only)

The dialog looks like the following.



The dialog lets you set additional conditions for which a new file is created during a recording. If you specify more than one condition, a new file is created as soon as one of the specified conditions is true.

for each new sound format (fixed option) – a new file is created if the sound stream format differs from the format of the previously recorded sound. This option is fixed – you cannot disable it. If a specific format is set for a recording, then the sound stream format cannot differ from a format of previously recorded sound and the condition does not fire. The condition can be true only if recording is performed in Software mode and the “Convert using parameters specified below” option (see ["Setting Recording Parameters"](#) section) is not set.

for each software sound stream – a new file is created for each new sound stream being recorded in software mode. Setting this option can be useful if you want to write each sound stream to different files. For example, if you are using WinAmp to play a playlist, you can play each song from the playlist in a different stream. If you set this option and start recording sound that is being played by WinAmp, each song from the playlist will be recorded to a separate file.

every nnn minutes of recording – a new file is created every **nnn** minutes of recording.

every nnnn megabytes of recording – a new file is created once the current file reaches **nnnn** megabytes in size.

if sound level does not exceed mmm % in nnn seconds.


Do not create files shorter than kkk seconds. – a new file is created if the recording level during an interval of **nnn** seconds was less than **mmm** % of the maximum sound level. This setting is useful, for example, when you record from an audio cassette and want to record each song to a different file. Setting the value of **kkk** seconds can help prevent Total Recorder from saving long intervals between songs.

To set limits on an overall recording session, refer to the ["Using the Advanced stop recording conditions Dialog"](#) section.

Using a Scheduler overview

Total Recorder lets you program jobs (recording or playback) to start at a given time, similar to programming your VCR. You can either use Total Recorder's built-in scheduler or use command line options with an external scheduler, such as Microsoft Task Scheduler. The preferred method is to use the built-in scheduler because it lets you set all the parameters using a GUI and you can set different parameters for each job.

To start the built-in scheduler:

From the "Options" menu, select "Schedule...", or press the  button on the main toolbar. You are presented with the "Record/Play Schedule" dialog box.

To use an external scheduler:

Put Total Recorder as one of the scheduled tasks using the appropriate command line parameters. These command line parameters are described in the section "[Using the Command Line](#)".

The Total Recorder Log contains a list of all messages relating to jobs scheduled by the built-in scheduler or initiated through the command line. For information on this log, refer to the section "[Using the Total Recorder Log](#)".

Launching Scheduled Jobs


Launching of a scheduled job starts one second before the scheduled time. The actual starting time depends on the speed of your computer but one second is usually more than enough to start a program. A scheduled job stops at exactly the scheduled time regardless of the time it was started.


For each scheduled job, a new copy of Total Recorder is launched regardless of another copy being present. This copy closes after the job is finished except in the following two cases:

- you started the job with command line parameters (either explicitly or implicitly) that indicate the copy should stay active
- you interrupted the job.

Actions You Can Take During a Scheduled Job

During performing a scheduled job or a job initiated from the command line, all buttons and menu items are disabled except:

- the Interrupt work () button on the Main toolbar
- the “Interrupt work” item on the “Play/Record” menu
- the “Exit” item on the “File” menu.

Clicking the  button, or selecting the corresponding menu item, stops the job. Already recorded information is put to a file, an error message “Job interrupted by user” is written to the Total Recorder Log, and Total Recorder stays active. When you use “Exit” from the “File” menu or close Total Recorder in any other way (e.g. Alt-F4), all of these actions are done after the program terminates.

Handling Errors and Other Problems

The Total Recorder sound driver is a component that checks the time and launches the Total Recorder program. If for some reason the driver is not installed, scheduled jobs will not be launched.

Error messages, such as "file does not exist", do not go directly to a user since a user is not always present. These messages go to the Total Recorder Log.

If recording was active but nothing was actually recorded, the empty file is not saved and a message "Nothing has been recorded" is written to the Total Recorder Log. This may happen if "Software" was set as a source but none of the programs played sound during the recording time. The job is considered to perform normally if it was not interrupted.



Displaying and Controlling Scheduled Jobs

The "Record/Play Schedule" dialog shows a list of scheduled jobs. From this dialog you can control scheduled jobs and create new ones.

Select "Schedule" from the "Options" menu and you are presented with the following dialog:



Job – scheduled job types, "Play" or "Record". There is an icon to the left that reflects the job status:

Icon	Status
	job should be performed
	job is disabled
No icon	job should not be performed because the time has passed, regardless of whether the job was actually performed

Status – the result of the job. For a repeated job (e.g. daily), the last result is displayed. You can view detailed results in the "Schedule item" window, accessed with the "Edit" button. This window is described later.

The **Status** field can be one of the following:

Status	Explanation
Empty	never run
Done	job ran normally
Expired	job did not run and never will because the time has already passed. Your computer being switched off at the scheduled time for the job may have caused this. For repeated jobs, this will never be displayed.
Interrupted	job was interrupted by a user
Error	error during the job. The error message can be viewed in the "Schedule item" window.
Running	Currently the job has been performed by another running instance of Total Recorder. It is also possible that the job was

started but there is no information of a normal or abnormal termination. Your computer being switched off during the job may have caused this.

The **Status** field contains information from the Total Recorder Log. If records were deleted from the Total Recorder Log, either automatically or manually, they will not appear here. If all records for a particular job were deleted, the job will appear as if it had never run.

Date – identifies when the job should run:

Date	Explanation
Daily	each day
Day of the week	each week on the given day
YYYY.MM.DD	the date when the job should run

Start time – the time the job should start (in 24-hour format, hh:mm:ss).

Stop time – the time the job should finish (in 24-hour format, hh:mm:ss). If the "Stop time" is less than the "Start time", it is assumed that the "Stop time" belongs to the next day. For playing a file, you can omit the "Stop time" and the file will be played back once.

File – the name of the file being played or recorded. This is always a full path. When using automatic file name generation rules for recording, it shows “* Auto *” (if split mode is disabled) or “* Auto split*” (if split mode is enabled).

Controls

You can use the following controls from this dialog:

"Delete when done" box. If set, a job that finishes normally will automatically be deleted from the list.

"New" button. Open the "Schedule item" dialog for entering a new job.

"Clone" button. Build a new job by copying the current one and then open the "Schedule item" dialog for editing. This is useful, for example, if you need to schedule a job to run on certain days of the week but not daily.

"Edit" button. Open the "Schedule item" dialog for detailed viewing and editing of job parameters.

"En./Dis." button. Current job switches between Enable and Disable status. An icon reflects the current status. A crossed icon means Disable and such jobs are kept in the list but are not started.

"Delete" button. Deletes current job, after confirmation.

"OK" button. Accept all changes.

"Cancel" button. Discard all changes. If any changes were made, confirmation is

required.

You can perform some actions (e.g. delete, enable, disable) on multiple scheduled jobs. You can use the standard Ctrl+click and Shift+click operations to select/deselect scheduled jobs in the list.

Scheduling a Job

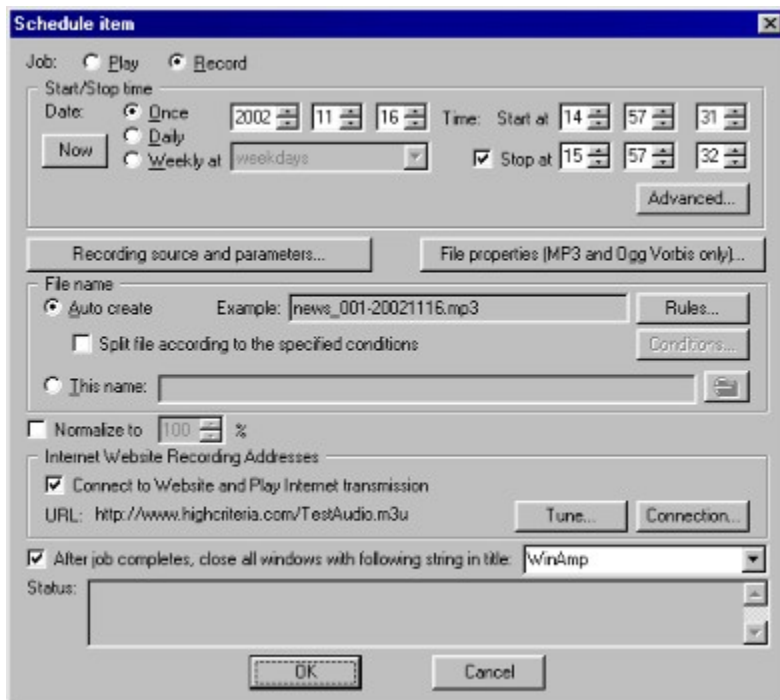
Use the "Schedule Item" dialog to schedule a job, either a recording or a playback.

1. Open the "Record/Play Schedule" dialog.
2. Use the "New" button to create a new job.

OR

Select a job and use the "Clone" button to copy the current job for editing. This is useful, for example, if you need to schedule a job to run on certain days of the week but not daily.

3. Use the following dialog to specify your requirements:



Job

You must specify the action. Select "Play" or "Record".

Date

You can schedule jobs with the following frequency:

Frequency	Explanation
Once	one time. Specify year, month and day (in that order) when the job should start.
Daily	each day
Weekly	each week. From the list you can select a day of the week, weekdays (Monday through Friday), or weekends (Saturday and

Sunday).

The "Now" button sets the current date and time as the moment when the job should start. The time when the job should stop is set as the current time plus one second. After that, you can modify these parameters manually.

Time

You can specify a starting time and a stopping time:

- **Start at** – time (hours, minutes, and seconds) when the job should start. The job will be launched one second before the scheduled time.
- **Stop at** – time (hours, minutes, and seconds) when the job should stop. This is required for recording and optional for playback. Zeros in this field means midnight and not the absence of a stop time. If the "Stop at" time is less than the "Start at" time, the activity (either play or record) will stop the next day.
- If you want to specify a stopping time for playback, select the "Stop at" check box to the left, and enter your stop time. A file will be played continuously from the "Start at" time until the "Stop at" time, regardless of the length of the file. Without a stop time, the file will be played once.

Advanced (Professional and Developer Editions only)

This button activates the "Advanced stop recording conditions" dialog. For more information, refer to the ["Using the Advanced stop recording conditions Dialog"](#) section.

Recording source and parameters

When you use this button the Recording source and parameters dialog appears. Refer to the ["Setting Recording Parameters"](#) section.

File properties (MP3 and Ogg Vorbis only)

This button is enabled only when you schedule a recording and conversion either to MP3 (MPEG Layer 3) or Ogg Vorbis. When you click this button, either the MP3-file properties dialog appears (refer to the ["Using the MP3 properties Dialog"](#) section), or the dialog for setting Ogg Vorbis tags appears (refer to the ["Working with Ogg Vorbis tag"](#) section).

File name

This specifies the name of the file you want to create or play: You can use these options:

Auto create filename (TRyyymmdd_hhmmss) (Standard Edition only) – this may be used for recording only. A new file is created based on the current date and time when the job completes. The file will be placed in the Total Recorder current directory.

Auto create (Professional and Developer Editions only) – this can be used for recording only. A new file is created based on the file name generation rules. You can set the rules by pressing the "Rules..." button.

Rules (Professional and Developer Editions only) – this can be used for recording only. This button activates the "File name generation rules" dialog. For more information refer to ["Specifying file name generation rules"](#) section.


Note: If a date or time is specified in the file name generation rules, then the date and time depends on your split mode setting.

If split mode is active File names are generated during the creation of files (i.e. the date and time are fixed when the first portion of sound data for the file is received)

If split mode is not active File names are generated after the recording has finished (i.e. when saving the file).

Split file according to the specified conditions (Professional and Developer Editions only) – this may be used for recording only. This box enables or disables split mode. For more information, refer to the ["Using Split Mode"](#) section. You can set Split conditions by pressing the "Conditions..." button.

Conditions (Professional and Developer Editions only) – this may be used for recording only. This button activates the "Split recording conditions" dialog. For more information, refer to the ["Using the Split recording conditions Dialog"](#) section.

This name – a file name for recording or playback. You can enter it manually or use the "Browse" () button.

Normalize to ...%– you can normalize a recording, using the percentage indicated, before saving. This only applies when recording. The Scheduler lets you specify normalization for all formats including compressed. In the latter case, the actual recording is in PCM format and will be normalized and converted when saving. Normalization is not possible if split mode is on.

When saving an automatically recorded file, Total Recorder overwrites an existing file with the same name and no message is written to the Total Recorder Log. If a file with a given name cannot be created (e.g. the directory does not exist) a message is put to the Total Recorder Log and all recorded information is lost. It is recommended you use automatic file name generation to decrease the risk of these errors.

Connect to Website and Play Internet transmission (Professional and Developer Editions only) - This feature can be used only for recording. This box causes the Internet transmission, selected through the "Tune" button, to be played when a scheduled recording starts. A play-URL is displayed below the check box. To specify the Internet transmission to play, use the "Tune..." button. For more information, refer to the ["Tuning into Internet Transmissions"](#) section.

Tune (Professional and Developer Editions only) – this button activates Total Recorder's mini-browser to tune into an Internet transmission. For more information, refer to the ["Tuning into Internet Transmissions"](#) section.

Connection (Professional and Developer Editions only) – this button activates the "Connection to Internet" dialog. For more information refer to the ["Connecting to Internet"](#) section.

After job completes, close all windows with following string in title: (Professional and Developer Editions only) - This box causes all windows with the specified string in their titles to be closed when the scheduled job completes. You can select this string from the drop-down list, or type it manually in the box at the right. This feature can be useful, and sometimes required, if you need to close the player before the next scheduled recording

starts.

Status - Lists all of the Total Recorder Log messages, in chronological order, for the current job. If a job has not started, this field is empty. The purpose of this field is to help you with scheduling. For example, if you edit an old job it can be useful to see if it has ever run and what the results were.

Tuning into Internet Transmissions (Professional and Developer Editions only)

Total Recorder can tune into an Internet transmission and have it play when a scheduled recording starts. To tune into an Internet transmission, enable the "Connect to Website and Play Internet transmission" option and press the "Tune..." button on "Schedule Item" dialog.

The Total Recorder mini-browser, similar to the following, appears:



Address – specify the URL you want to go to and press the "Enter" or "Go" button. You can use the "Browse" (📁) button to select and open local files.

Go, Back, Forward, Stop, Home buttons – same functionality as that of Internet Explorer.

Capture transmission – This button is used to capture Internet transmission. After pressing this button, it changes from "Capture transmission" to "Abort capturing". If you decide to stop capturing, press the "Abort capturing" button.

To capture an Internet transmission, take the following steps:

1. Go to a page from which you can immediately launch playing. For example, you can launch playing from the page <http://www.highcriteria.com/acme.htm> immediately by clicking on an "Listen to Mayor's speech on increased pedestrian traffic" link.
2. Press the "Capture transmission" button.
3. Click a link to start playing (e.g. "Listen to Mayor's speech on increased pedestrian traffic" link).
4. Answer "Yes" to the question "Save URL ... as location to play? ...". The "Name", "Base page", and "Play address" fields in the "Transmission to play" group will be

filled in.

5. Press the "Play" button to check if your transmission is being captured correctly.

Transmission to play group

Name – list of named transmissions. By naming a saved transmission, it can be easily selected from the list in the future.

Save as – assign a name to the transmission. This name appears in the "Name" list at the left.

Remove – remove a named transmission.

Base page – the page from which the transmission was captured. This field is filled in when capturing begins.

Go – pressing this button takes you to the page specified in the "Base page" field.

Play address – the address being used by Total Recorder to play transmission. This field is filled in when capturing begins. However, you can specify the field explicitly (e.g. extract it from another Internet-related program).

Play – pressing this button causes Total Recorder to perform the same actions as those performed during scheduled playing of the specified Internet transmission.

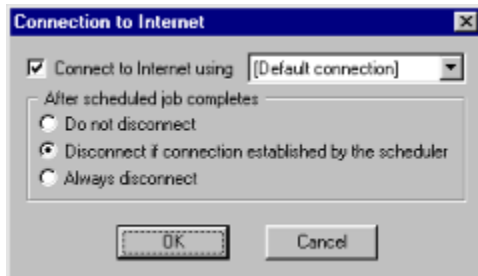
Notes:

- If a transmitting server requires registration procedures, you must complete these before using Total Recorder's mini-browser to access the server.
- Playing a transmission could cause some external player (e.g. WinAmp or Windows Media Player) to be launched.
- It is not guaranteed that you will successfully capture or play every Internet transmission.
- It is recommended you use the "Play" button to test captured or manually entered transmissions.

Connecting to the Internet (Professional and Developer Editions only)

If you choose to play an Internet transmission during a scheduled recording, you may want Total Recorder to connect/disconnect to your Internet Service Provider (ISP) by dial-up line. You can do this by setting parameters in the "Connection to Internet" dialog.

The dialog looks like the following:



Connect to Internet using ... - enables or disables connection to your ISP by dial-up line. You must choose a particular ISP from the list or use "[Default connection]". If you choose "[Default connection]", then Total Recorder will try to connect to the Internet through the ISP which is set in Internet Explorer as your default connection.

If a connection to the Internet is established at the same time a scheduled job starts, then Total Recorder will not try to establish a new connection.

After scheduled job completes

Select one of the following options:

Do not disconnect. Total Recorder will not disconnect from the ISP after a scheduled job completes.

Disconnect if connection established by the scheduler. Total Recorder will disconnect from the ISP after a scheduled job completes only if Total Recorder's scheduler established the connection to the ISP.

Always disconnect. Total Recorder will disconnect from the ISP after a scheduled job completes regardless of which program established the connection to the ISP.

Notes:

- Your dial-up entries must be set correctly.
- Since a scheduled job does not require user intervention to execute the job, your connection to your ISP must not require that you enter any information such as a user name or password.
- You should try to make a connection in test mode before using connection capabilities for regular connection.

Using the Command Line

Performing a job specified in the command line is similar to performing a job started by the built-in scheduler. From the command line, you can play or record a file.

General Command Line Syntax

The syntax of Total Recorder's command line is:

```
TotalRecorder [Filename] [/Play/Record] [/Time:[[hh:]mm:]ss]  
[/Normalize[:percent]] [/Noclose]
```

A file name, if specified, must be the first parameter. Other parameters can be in any order.

Filename Parameter

The name of the file you want to load, play or record. If the name contains spaces, enclose it within double quotes (e.g. "My Recordings").

/Play Parameter

Play a file. The filename is mandatory.

You can use the abbreviation - **/P**.

/Record Parameter

Perform recording. The current source and recording parameters will be used. If a file name is specified the result will be saved with this name. Otherwise, a name in the form of **TRyyyymmdd_hhmmss.WAV** will be generated based on the current date and time. The file will be placed in the Total Recorder current directory.

For recording, duration must be specified using the /Time parameter.

You can use the abbreviation - **/R**.

/Time Parameter

Specifies the duration of recording or playing. This is required for recording.

If you omit this parameter for playing, the entire file will be played once. If you specify this parameter for playing, a part of a file may be played or the playing may be repeated as necessary. For example, if you schedule a 4-minute file to play for 10 minutes, it will play 2 ½ times. Or if you schedule a 10-minute file to play for 4 minutes, only the first 4 minutes of the file will play.

You can use the abbreviation - **/T**.

There are three different ways to specify duration. The following examples each specify the same duration (1 hour, 1 minute, and 1 second):

- **/T:hh:mm:ss**, for example: /T:1:01:01 or /T:1:1:1
- **/T:mm:ss**, for example: /T:61:01 or /T:61:1
- **/T:ss**, for example: /T:3661

The following are examples of incorrect formats:

- /T:1:61:01 - since *mm* cannot exceed 59
- /T:2:60 - since *ss* cannot exceed 59

/Normalize Parameter

This parameter causes Total Recorder to normalize the file to a given percentage after it is recorded. You can specify a value from 1 to 999. The default is 100%. For example:
/Normalize:95 .

You can use the abbreviation - **/Norm.**

/Noclose Parameter

This parameter causes Total Recorder to stay active after the job is done. If not specified, Total Recorder will close except in the case where neither /Play nor /Record were specified.

You can use one of the abbreviations - **/NC** or **/N.**

Examples

Perform recording for five minutes, save the result in a file with an automatically generated name and do not close the program:

TotalRecorder /R /T:5:00 /NC

Play a sound file and close the program:

TotalRecorder C:\MyFolder\MySoundFile.WAV /P

Play a bell (Ring.WAV) continuously for one minute:

TotalRecorder C:\MySoundDir\Ring.WAV /P /T:60

Start Total Recorder and load a sound file. You can then use the "Play" button to play the file:

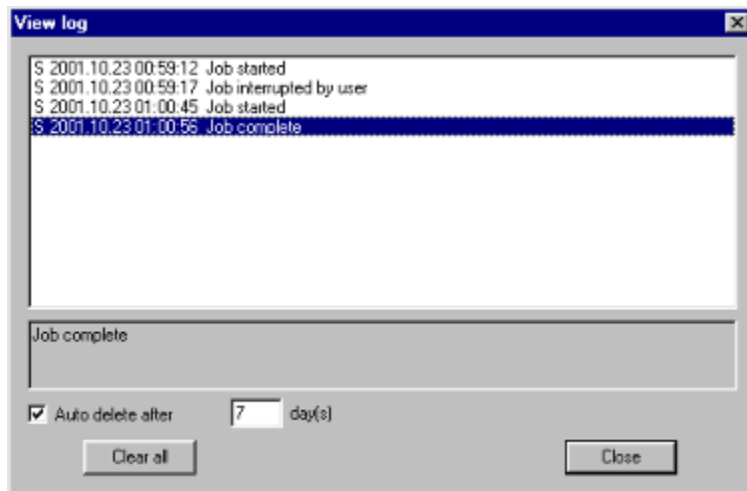
TotalRecorder "C:\My folder\My sound file.WAV"

Using the Total Recorder Log

The Total Recorder Log contains a list of all messages relating to jobs scheduled by the built-in scheduler or initiated through the command line or auto stop. This log sits in the registry and unlimited expansion is not desirable. By default, all records older than one week will be automatically deleted.

Some errors cannot be written to the Total Recorder Log, for example, errors when writing to the registry and syntax errors in command line parameters. These errors will not occur when working with the built-in scheduler.

To review or control information in the Total Recorder Log, select "View log" from the "File" menu. You are presented with the following dialog:



Message list





The list contains all messages, in chronological order, relating to jobs scheduled by the built-in scheduler or initiated through the command line. For each job it includes the starting time, ending time, and all error messages. Scheduler messages are marked with the letter "S"; command line messages and auto stop related messages are marked with the letter "P". The current message is displayed below the list.

Controls








You can use the following controls from this dialog:


- **Auto delete after** – controls the automatic deletion of obsolete records. This is the default mode. Switching it off is not recommended because it will cause the registry to grow and decrease system performance.
- **Day(s)** – records will be deleted after this number of full days. Records are deleted at midnight on the expiry date or the next time your computer is on after this date. For example, "0" means that only records from the current day are accessible, "1" means that records will be kept for one full day and deleted at midnight the following day, and so on.
- **Clear all** – delete all records. Confirmation is required.
- **Close** – close the dialog. All changes are made immediately.

File menu

Menu Item	Edition	Action	Button	Shortcut
New	All	Create a new file		Ctrl+N
Open	All	Open an existing file		Ctrl+O
Save	All	Save an open file using the same file name. See "Saving a Recording" .		Ctrl+S
Save as	All	Save an open file using a new file name. See "Saving a Recording" .	None	None
Save selection as	All	Save selection to a file. See "Editing a Sound File" .		None
Delete current file	PE, DE	Delete current file	None	None
Properties	All	Display properties of current file. See Displaying File and Recording Properties .	None	None
Tag	All	Display/add/delete/edit an ID3 tag or an Ogg Vorbis tag. See Using the MP3 properties Dialog and Working with Ogg Vorbis tags .	None	None
View log	All	View the Total Recorder Log. See "Using the Total Recorder Log" .	None	None
Exit	All	Exit Total Recorder	None	Alt+F4










Edit menu

Menu Item	Edition	Action	Button	Shortcut
Undo	All	Undo previous operation		Ctrl+Z
Redo	All	Redo the previously undone action		Shift+Z
Cut	PE, DE	Delete selection and place it to the Clipboard		Ctrl+X
Copy	PE, DE	Copy selection to the Clipboard		Ctrl+C
Paste	PE, DE	Paste data from the Clipboard to the current recording		Ctrl+V
Delete selection	PE, DE	Delete selection		Delete
Delete except	PE, DE	Delete data except what is		Ctrl+Delete

selection		selected		
Insert a file at current position	PE, DE	Insert a file at current position	None	None
Selection	All	Selection submenu. See <u>"Selection Sub-menu"</u> .	None	None
Stop playing at selection boundary	All	Stop playing at nearest selection boundary		P

See also "Editing a Sound File".

Selection Sub-menu

Menu Item	Edition	Action	Button	Shortcut
Set beginning of selection	All	Set left selection boundary as the current position of the slider		Shift+L
Shift beginning of selection left by 0.1s	All	Shift beginning of selection left by 0.1s		Shift+M
Shift beginning of selection right by 0.1s	All	Shift beginning of selection right by 0.1s		Shift+N
Go to beginning of selection	All	Move current position of slider to left selection boundary		L
Set end of selection	All	Set right selection boundary as the current position of the slider		Shift+R
Shift end of selection left by 0.1s	All	Shift end of selection left by 0.1s		Shift+S
Shift end of selection right by 0.1s	All	Shift end of selection right by 0.1s		Shift+T
Go to end of selection	All	Move current position of slider to right selection boundary		R
Select all	All	Select entire sound data	None	Ctrl+A
Toggle selection off	All	Toggle current selection off		Ctrl+Shift+C


See also "[Using the Selection Panel](#)".

View menu

Menu Item	Edition	Action	Button	Shortcut
Show selection	All	Show/Hide Selection panel. See also " Using the Selection Panel ".	None	None
Show sound image	PE, DE	Show/Hide Sound Image panel. See also " Working With Sound Image ".	None	None

Play/Record menu



Menu Item	Edition	Action	Button	Shortcut
To start	All	Rewind to the beginning		None
Left by...	All	Move current position to the left with a fixed step		Ctrl+L
Right by...	All	Move current position to the right with a fixed step		Ctrl+R
To End	All	Fast forward to the end		None
Jump to time	All	Jump to specified location		Ctrl+J
Play selection	All	Play back a selected fragment of a file	None	Ctrl+E
Play	All	Play file. See " Playing a sound file ".		Ctrl+Y
Pause/Continue	All	Pause or continue playing or recording file		Ctrl+U
Stop	All	Stop playing or recording a file		Ctrl+P
Record	All	Start recording. See " Starting Recording ".		Ctrl+R
Split now	PE, DE	Split current recording immediately		Ctrl+I
Append recording mode	PE, DE	Switch to Append recording mode. See " Using the Open/Save Tab ".		None
Insert recording mode	PE, DE	Switch to Insert recording mode. See " Using the Open/Save Tab ".		None
Pre-recording ... last seconds	All	Turn pre-recording mode on or off. See " Using Pre-recording mode ".	None	Ctrl+G
Clear pre-recording buffer	All	Clear the pre-recording buffer. See " Using Pre-recording mode ".	None	Ctrl+B
Auto stop	All	Set or reset auto-stop	None	None

recording		recording mode. See Using Auto Stop Mode .		
Interrupt work	All	Interrupt current job. See Actions you can take during a Scheduled Job and Using the command line .		None

Volume menu

Menu Item	Edition	Action	Button	Shortcut
Normalize	All	Normalize the volume of a sound file. See Normalizing a Sound File .	None	None

Options menu

Menu Item	Edition	Action	Button	Shortcut
Settings	All	Configure Total Recorder. See Configuring Total Recorder overview .		None
Recording source and parameters	All	Set recording source and parameters. See Setting recording parameters .	-//-	None
Schedule	All	Display and control scheduled jobs. See Using a Scheduler overview , Displaying and controlling Scheduled Jobs , Scheduling a Job .		None
System settings	All	Show Multimedia panel with system settings	None	None

Help menu

Menu Item	Edition	Action	Button	Shortcut
Help Topics	All	Index to help topics	None	None
Internet Links	All	Display a page of links to MP3 and Ogg Vorbis software. See Working with MP3 format and Using the Ogg Vorbis Tab .	None	None
Registration	All	Register program. See How to obtain a registration key .	None	None
About Total Recorder	All	Display the version number, edition, and registration information	None	None

Symptom - Unable to Play Simultaneous Sound Streams

After the installation of Total Recorder your computer lost the ability to play several sound streams simultaneously. This applies only to some very advanced sound cards that are capable of playing multiple streams or if your computer has more than one sound card.

Possible Cause #1

During the Total Recorder installation, its driver is set as a preferred device and the "Use preferred devices only" flag is set. This flag disables playing multiple sound streams. Some programs (e.g. Windows Media Player) need this flag to be set in order to work correctly with Total Recorder (see next symptom, Possible Cause # 3).

Action #1

Select "Start"- "Settings"- "Control Panel" (for Windows XP select "Start"- "Control Panel") - "Multimedia" (or "Sounds and Multimedia", or "Sounds and Audio Devices") (or from the Total Recorder menu, select "Options"- "System settings"), tab "Audio", and uncheck the box "Use preferred devices only". If this causes a problem after recording a program, you will need to turn it on during recording and then turn it off when you are done. Or you can set mode to turn on the Total Recorder driver only when Total Recorder is running. For more information, refer to the ["Using the System Tab"](#) section. In this case you should uncheck the "Use preferred devices only" flag, in order to turn it off automatically when Total Recorder finishes.

Symptom - No sound recorded

Sound is reproduced but Total Recorder does not record it. The slider remains at the left edge and the "Length (sec.)" counter does not change.

Possible Cause #1

Some playback programs do not perform a system inquiry for the default sound driver; they explicitly indicate the driver they need. These programs may be older, obsolete programs or may use special functions of specific devices. It is not possible to set the system to ignore these direct requests and sounds reproduced by such programs will not be recorded.

Action #1

Change the playback program where possible.

Possible Cause #2

Some programs (e.g. Internet telephony) have the ability to select the necessary audio driver manually and ignore system settings.

Action #2

Read the program manual and set the Total Recorder driver as both the driver for playing and recording.

Possible Cause #3

Total Recorder's driver perceives a sound stream in main wave-format (PCM, pulse-coded modulation) only. If the reproducing program sends a sound stream in any other format (e.g. compressed), Windows usually calls the decoding drivers itself to perform all of the required translation. However, if your sound card can make some translation at the hardware level, then Windows can direct the sound stream to the driver of such a sound card immediately, and bypass Total Recorder's driver. As a result, sound cannot be recorded.

Action #3

Select "Start"- "Settings"- "Control Panel" (for Windows XP select "Start"- "Control Panel") - "Multimedia" (or "Sounds and Multimedia", or "Sounds and Audio Devices") (or from the Total Recorder menu, select "Options"- "System settings"), tab "Audio", and check the box "Use preferred devices only". This eliminates the use of any device other than the default one.

Possible Cause #4

The mode "Preferred audio devices when Total Recorder isn't active" - "Audio playback and recording devices selected above" is turned on. In this case, if the playing back of the sound you are attempting to record was started before Total Recorder was started, the playback program does not use the Total Recorder driver. You have changed playback or recording preferred device either manually or it has been done after the play back was started.

Action #4

Without closing Total Recorder, close the playback program and restart it. Try to make your recording again. Remember if the mode of automatic driver switching is turned on, you should start Total Recorder first and only after that should you start the playback program from which you are going to record sound.

Symptom - Sound recorded with gaps

Sound is recorded with gaps.

Possible Cause #1

Total Recorder does not have enough time to record sound. This can happen on slow computers or when a slow device (e.g. a diskette) is used as a destination device for the temporary recording file.

Action #1

Use a faster device for storing temporary files.

Possible Cause #2

The Playback program's buffer is bigger than Total Recorder's driver buffer. In this case all sound will be omitted. The "sec. lost" counter will grow while the "Position (sec.)" counter will remain at 0. This situation is extremely unlikely since Total Recorder's buffer should be big enough.

Action #2

Go to the URL: <http://www.highcriteria.com/support.htm>.

Possible Cause #3

Your computer is overloaded with other jobs.

Action #3

Select "Options"- "Settings", "System" tab and enable the "High priority" setting.

Possible Cause #4

There are incompatibility problems between your soundboard and hard drive controller. This may occur in Sound Board mode when using some soundboards with recordings of a long duration.

Action #4

Select "Options"- "Settings", "Open/save" tab and disable the "Flush the temporary file every XX seconds" setting.

Symptom - Sound system or playback programs not working properly

After installing Total Recorder, the sound system or some playback programs are not working properly, even when Total Recorder is not active.

Possible Cause #1

There is an incompatibility with Direct Sound. When a playback program uses Direct Sound, the sound can sometimes be garbled.

Action #1

Many modern programs can be set up to optionally use Direct Sound. Read the program's help to determine the required settings.

Possible Cause #2

The Total Recorder driver is not compatible with other installed programs.

Action #2

Describe your system configuration and the nature of your problem via E-mail to High Criteria Inc. This will help eliminate the problem in future releases.

You cannot record from a conflicting playback program. However, you can eliminate the conflict when Total Recorder is not active by using the Total Recorder driver as a preferred device only when necessary. This can either be done automatically; each Total Recorder starts up and shuts down, or manually. Automatic switching is simpler.

To automatically switch preferred devices:

Use the "Options"- "Settings", "System" tab, and set "Preferred audio devices when Total Recorder isn't active" as "Audio playback and recording devices selected above". For more information, refer to the "[Using the System Tab](#)" section.

To manually switch preferred devices:

1. Leave the default setting for "Preferred audio devices when Total Recorder isn't active" as "Total Recorder driver (recommended)". Total Recorder will not switch devices and will not check the settings until it needs some service from its driver (i.e. during a recording from source "Software").
2. Use the Windows system dialog ("Start"- "Settings"- "Control Panel" (for Windows XP "Start"- "Control Panel"), "Multimedia" (or "Sounds and Multimedia", or "Sounds and Audio Devices"), "Audio tab", or use the Total Recorder menu items ("Options"- "System settings"), and select the devices that were set before the installation of Total Recorder. If you are unsure what to select, review the Total Recorder settings: "Options"- "Settings", "System" tab, "Audio playback and recording devices".
3. For recording sources other than "Sound board", you must make either one or two of the Total Recorder virtual devices (i.e. playback and recording) your preferred devices before you start the playback program you would like to record.
 - If you record from "Software" and "Record also input stream" is not checked, the device "Playback through Total Recorder" must be your preferred playback device.
 - If you record from "Software" and "Record also input stream" is checked, the device "Playback through Total Recorder" must be your preferred playback device,

and the device "Record through Total Recorder" must be your preferred recording device.

4. If Total Recorder needs a device that is not set as a preferred device when you start a recording, the recording does not begin and the system dialog pops up.
5. After your recording is finished, you can return the original preferred devices so that Total Recorder will not interfere with any other software.

Other Problems

If you experience problems with Total Recorder that you cannot resolve yourself, visit the support area at <http://www.highcriteria.com/support.htm>. You should read **Frequently Asked Questions** at http://www.highcriteria.com/faq_tr.htm before sending a letter to support.

When addressing the Technical Support Team, it is recommended you include a description of the problem and debug information. The following are some guidelines on the steps to take for different types of problems.

If the problem appears through an error message displayed in Total Recorder or its install program:

1. Press the "Debug info>>" button in the message box.
2. Press the Copy button in the message box. Debug information will be copied to the Clipboard. The size of this information will not exceed 20 kilobytes.
3. Insert the information from the Clipboard into your letter to the Technical Support Team.

If the problem does not appear with a Total Recorder error message:

1. Do not close Total Recorder. Go to the "Options"->"Settings"->"Debug" tab.
2. Press the "Copy all" button of the "Internal debug info" group. Debug information will be copied to the Clipboard. The size of this information will not exceed 20 kilobytes.
3. Insert the information from the Clipboard into your letter to the Technical Support Team.

If you cannot use the previous instructions or the problem is not directly related to Total Recorder (e.g. problem occurs in another programs):

1. Run Total Recorder and go to the "Options"->"Settings"->"Debug" tab.
2. Press the "Copy all" button of the "Internal debug info" group. Debug information will be copied to the Clipboard. The size of this information will not exceed 20 kilobytes.
3. Insert the information from the Clipboard into your letter to the Technical Support Team.

