

# CD Audio Ripping for use with Pricom "DreamPlayer"

## Introduction

As digital audio has evolved, the "Compact Disc" (CD) has been adopted by domestic end-users as a kind-of benchmark "standard". Historically, this is because the physical CD format, and associated digital audio specification, was the first "easy to use" digital audio combination that actually "sounded good" to most people. (Previously, most digital audio systems either sounded "weird", cost many many \$\$\$\$, or both ;- ) ).

While the audio data format on a regular CD is not "data compressed", obtaining a suitable audio file from the CD content for editing purposes is not quite as easy as it might appear. The physical "optical disk" format was really envisaged as a "final delivery" format, not a method of transporting data files.

The technique which has developed for "re-constituting" CD Audio files into ready-to-edit WAV files is known as "Ripping". Many applications are available that can accomplish this task, all with various sets of "bells and whistles".

The following tutorial has been created using one of the more common FREE CD ripping programs, "AudioGrabber". While other programs should be able to accomplish the same job, there will be slight differences in the terminology and process, which should be confirmed by the individual user.

## Ingredients

- 1 X PC, equipped with soundcard and CD drive  
(most current PCs will easily cover this, indeed,  
if you are reading this document on a PC, you probably have everything your need)
- 1 X CD of required audio  
(it helps if you have a track listing, but is not critical)
- 1 X "AudioGrabber" application installed on your PC  
(You can read about, and download the current version of "AudioGrabber" 1.83 FREE of charge from <http://www.audiograbber.com-us.net> )

## Method

This assumes you have "AudioGrabber" installed on your PC.

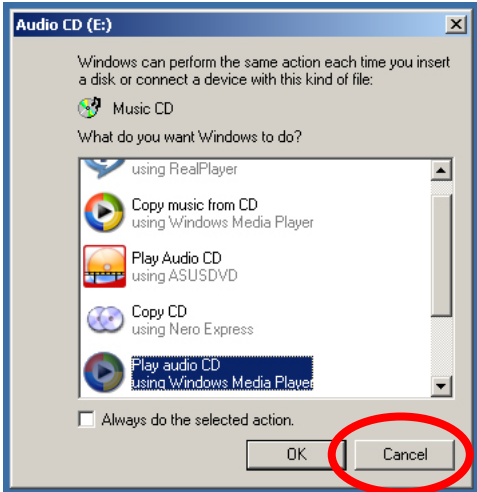
By default, AudioGrabber installs itself into a folder on the PCs "System drive", (often referred to as the "C drive").

### 1 – Launch AudioGrabber,

by default, AudioGrabber places a shortcut to itself on the desktop.

Simply Double-Click to launch AudioGrabber.





**2 – Insert the required audio CD into your PC’s CD drive.**

Windows XP MAY attempt to be “helpful”, and ask you which program you would like to open/play the disk with. Simply click “Cancel”

(NB If you have Winamp, Quicktime, RealPlayer, or some other audio player application installed on your machine, they may attempt to seize control of the CD playback. Simply close the player application)

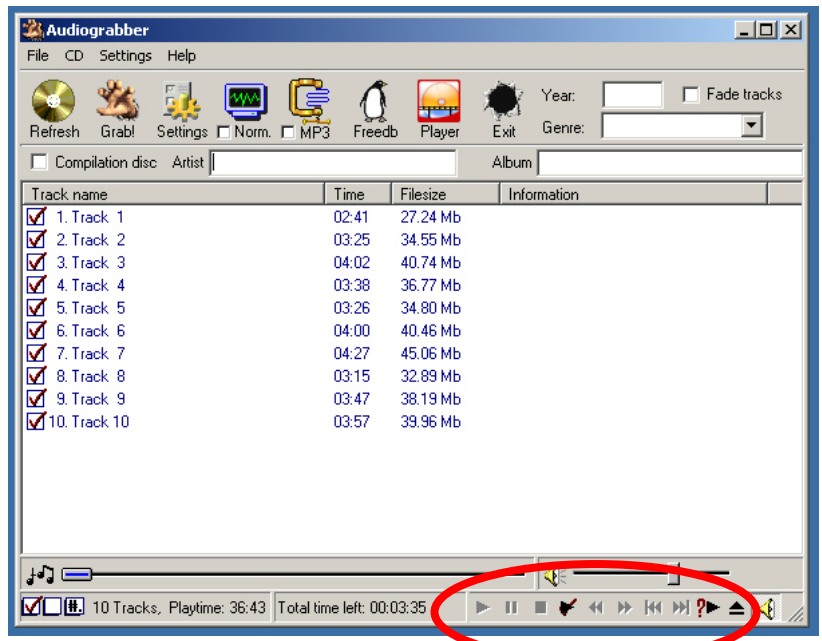
**3 - Now, back in AudioGrabber.... :-)**

AudioGrabber should now be displaying the list of “tracks” available on the CD.  
(The example CD has 10 tracks in total)

You will note that there are “Play”, “Stop”, “RRwd”, “FFwd”, “Track Fwd”, and “Track Back” buttons at bottom right.

These buttons allow you to “audition” which tracks you wish to rip, BEFORE the actual ripping process.

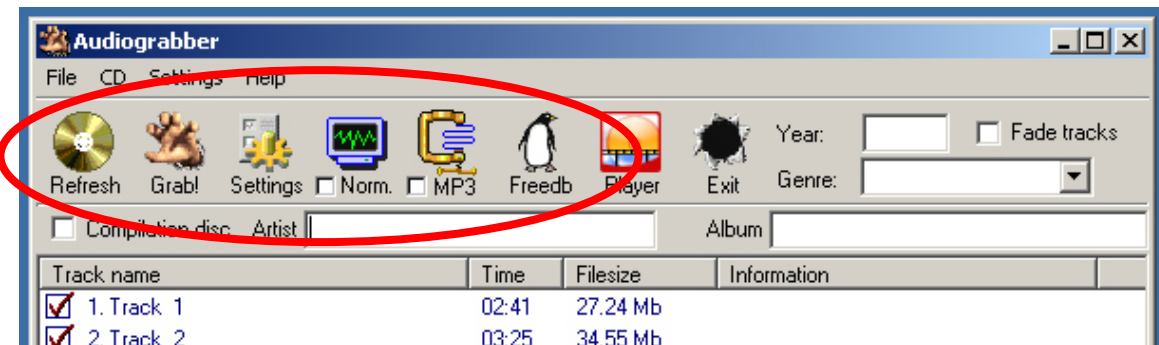
Simply click on a given track to select it, and hit “Play”.



**4 – Setting up AudioGrabber**

There are a few things we should cover before we get to actually “ripping” the required tracks.

Across the top of AudioGrabber are the following Buttons.



- "Refresh"  
Tells AudioGrabber to re-scan the CD drive, and update the list of available tracks. Helpful if you have finished ripping tracks from "Disc One", swap it for "Disc Two", and want to see what tracks are available on the new disc.
- "Grab!"  
Starts the "ripping" process. We'll get to this in a minute.
- "Settings"  
This is the "control room" for AudioGrabber. Assuming your machine is reasonably "up to spec", there really isn't much need to go in here.
- "Norm"  
Ticking the box to the left of "Norm" will tell AudioGrabber to "Normalise" the volume levels of the ripped audio file. (Squash "spikes" in volume, and raise "quiet bits").

If the ripped WAV file is intended to be used to provide background music/ambience, or for use in a Video production, (IE anywhere where unwanted volume "spikes" would cause problems),

then "Norm" should be Ticked.

However, if the intended purpose of the ripped file is to provide source material for sound design, or any other application where preserving the dynamic volume changes of the recording are critical, (EG the dynamics of an operatic performance, live "location recording" or similar),

then leaving "Norm" UN-ticked is the better option.

NB, once an audio file has been "normalised", it is relatively hard to "regain" the dynamic volume change in the original recording. However, a file can be easily "normalised" at any point AFTER ripping.

Therefore, if in doubt, (or unsure of the ripped file's intended purpose), Play it safe, keep "Norm" UN-Ticked!

- "MP3"  
Ticking this box instructs AudioGrabber to rip the contents of the CD Audio tracks, and convert them into MP3 format audio files.

For editing purposes, the compressed MP3 format is NOT suitable. Leaving the box UN-ticked will instruct AudioGrabber to rip the CD Audio to uncompressed WAV file format, ready to edit.

NB, The Pricom "DreamPlayer" is designed to play WAV file format files ONLY. MP3 format files are NOT compatible, and should not be used.

Therefore, it is HIGHLY RECOMMENDED to leave "MP3" UN-ticked!

- "FreeDB"  
Clicking "FreeDB" instructs AudioGrabber to consult a live online database of known CD Albums, songs, and artists, and attempt to "fill in the details" of the CD you are attempting to rip. (This of course assumes the machine is connected to the Internet!).

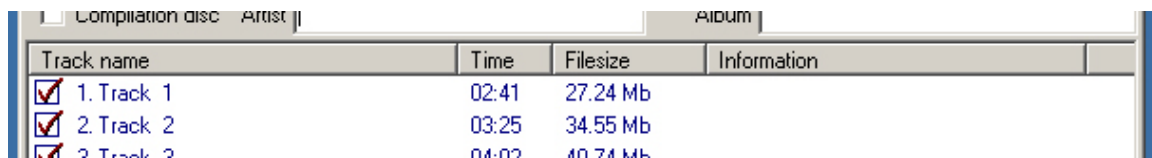
This can be helpful if you are ripping CD tracks for the purpose of providing background music, as it makes selecting the required tracks much more "instinctive", and avoids having to spend time laboriously typing in each Song/Track name individually, the Artist, Album Title, etc etc.

If however, the source CD is NOT a "production CD", (IE an album from a recognizable artist or recording label), then the info for that album will most probably NOT be in the "FreeDB" database.

- The rest of the top bar is dedicated to the adding of "Meta data" such as "Artist", "Album title", "Genre", "Year of Album Release", and other info to your ripped files. (These are the fields that will be filled in if you invoke the "FreeDB" database search function).

That's fine for people who are ripping MP3s to load into iPods or creating "background music" tracks, but not so useful for people doing Sound Design and Editing jobs. (See the "FreeDB" section above for more info)

In the Main Track Display Panel, each "CD track" has the following parts (Left > Right):



Track name	Time	Filesize	Information
<input checked="" type="checkbox"/> 1. Track 1	02:41	27.24 Mb	
<input checked="" type="checkbox"/> 2. Track 2	03:25	34.55 Mb	
<input checked="" type="checkbox"/> 3. Track 3	04:02	40.74 Mb	

- "Tick Box"  
This tick box allows you to select which tracks from a CD you want to rip, and which one's you wish to leave alone.
- "Track Name"  
This area displays the default track name for each track.  
If you invoke the "FreeDB" internet database, these fields will probably match up with the actual song names. However, by default, AudioGrabber gives each track a sequential "Track Name".
- "Time" and "File size" are self explanatory

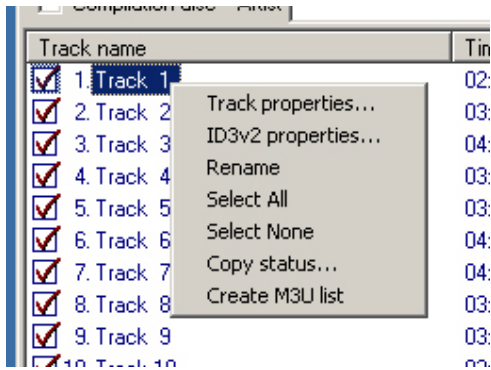
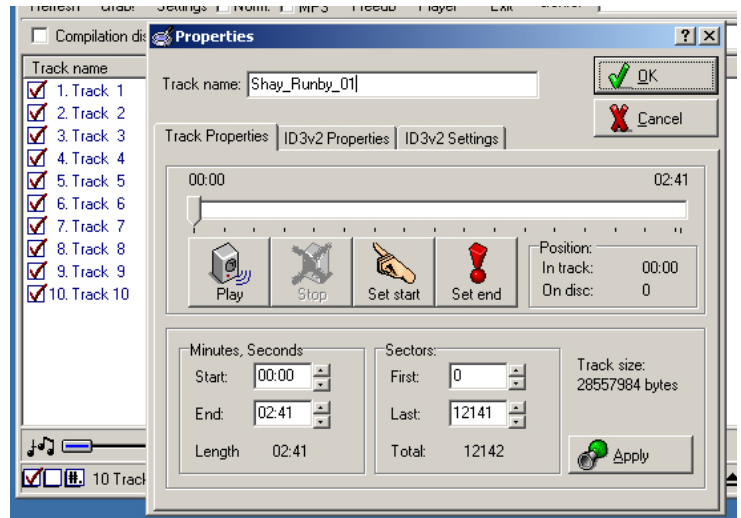
## 5 - Ripping the CD

Before you start madly ripping the tracks into edit-ready WAV files, it is strongly recommended that you give each track a test-listen, Select the tracks you need, and give them a Recognizable Track Name.

"Pre-listening" to the tracks is easily accomplished. Simply click on the track you wish to hear, and click the "Play" button at the bottom right of the AudioGrabber window. To stop playback of the track, click "Stop".

To rename a track, simply Double-Click the track in question. This will launch the "Properties Box" for the track. In this case, the example "Track 1" has been renamed "Shay\_Runby\_01"

To save the new name, click "OK"



(You can also launch the "Properties Box" by Right-clicking the track, And Left-Clicking "Rename" on the menu that appears)

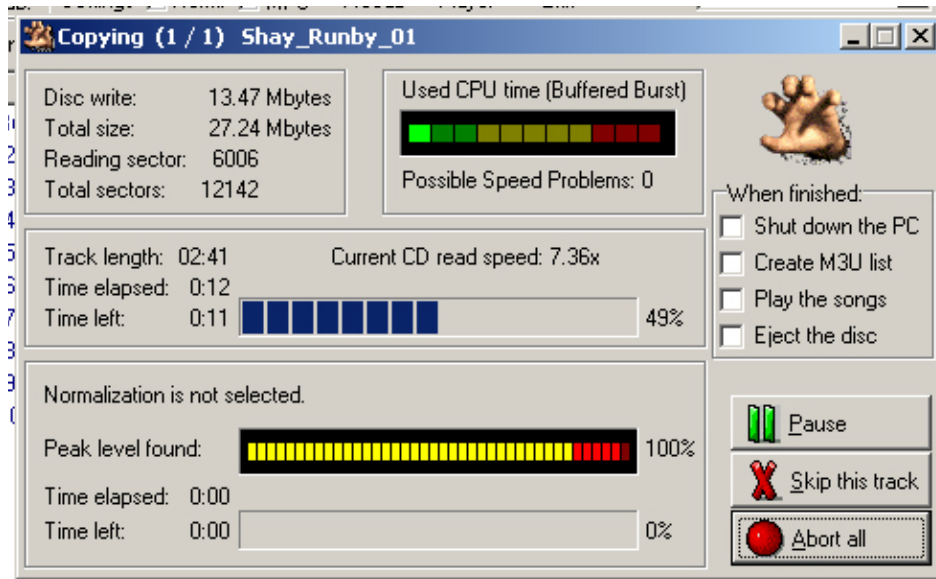
Once you have ascertained which tracks you wish to rip, And renamed each track as required, ensure that the required tracks have a Tick in their matching "Tick Boxes", and the tracks that are NOT to be ripped, have their "Tick Boxes" CLEARED.

Track name	Time	Filesize	Information
<input checked="" type="checkbox"/> 1. Shay_Runby_01	02:41	27.24 Mb	
<input type="checkbox"/> 2. Track 2	03:25	34.55 Mb	
<input type="checkbox"/> 3. Track 3	04:02	40.74 Mb	
<input type="checkbox"/> 4. Track 4	03:38	36.77 Mb	
<input type="checkbox"/> 5. Track 5	03:26	34.80 Mb	
<input type="checkbox"/> 6. Track 6	04:00	40.46 Mb	
<input type="checkbox"/> 7. Track 7	04:27	45.06 Mb	
<input type="checkbox"/> 8. Track 8	03:15	32.89 Mb	
<input type="checkbox"/> 9. Track 9	03:47	38.19 Mb	
<input type="checkbox"/> 10. Track 10	03:57	39.96 Mb	

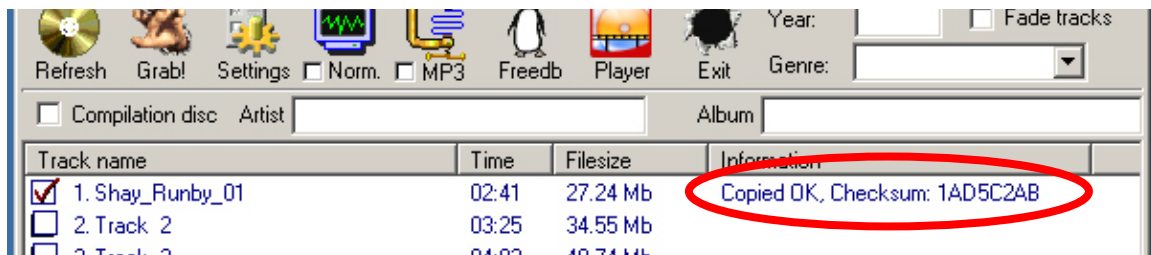
At this point, we're all ready to go!

Click the "Grab" button at top left of the AudioGrabber window!

During the ripping process, AudioGrabber displays a "progress window", an example is shown below.



After all nominated tracks have been "ripped", the AudioGrabber main window re-appears. Note that the example track, "Shay\_Runby\_01", now is noted as "Copied OK", and a checksum number is displayed.



From here, AudioGrabber has done its job. Close it, launch your favourite audio editing application, and your CD source sound files should be ready to import and edit.

By default, AudioGrabber stores the files it rips in its installation folder, so your files should be located in

C:/audiograbber

(In our example, the ripped file was called "Shay\_Runby\_01.WAV")

NB If you do NOT rename your tracks BEFORE you rip them, the ripped WAV files will be named something like "Track 1.WAV".

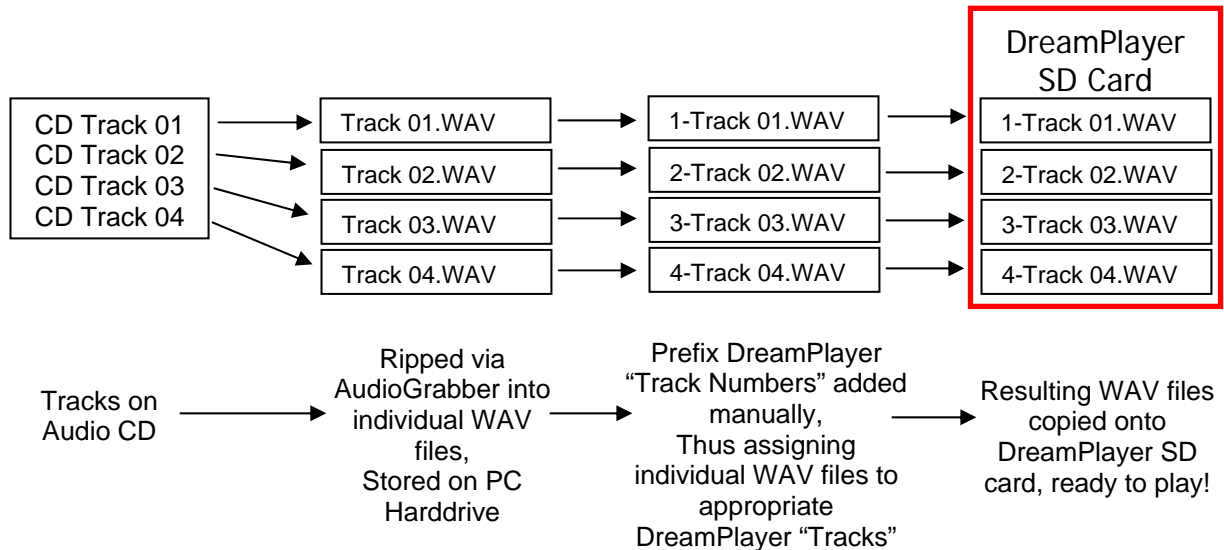
This can get confusing if you rip a few "track 1" tracks from different CDs in a single session!

### **A quick word about using the resulting WAV files in a Pricom "DreamPlayer".**

The "DreamPlayer" unit has the ability to play 4 independent "tracks" worth of audio on command. Each DreamPlayer "Track" consists of a single WAV file.

It should be noted that a DreamPlayer "Track" and a CD "Track" are 2 different things!

For example, if you wished to play the first 4 "tracks" or songs from a given Audio CD, then with a simple filename "tweak" to each ripped WAV file, the DreamPlayer could cue each song individually.



NB: It IS possible to construct custom "sequences"/WAV files of songs or sounds to be played by each given DreamPlayer "track".

However, the specific process of creating custom audio sequences/WAV Files in an Audio Editing application falls outside the scope of this particular "How-To".

Stay tuned for more "How-To" docs from Pricom, including audio editing tips and techniques...

Regards,

"Professor Pricom"  
C/O Pricom TechSupport