From What.cd's Wiki.

EAC Setup Process

This guide was made for EAC version 1.0 beta 3 and will not completely work with earlier versions. Versions 0.99 or earlier should use the blowfish guide.

Anything with a green outline around it is a required setting. Anything orange is required but depends on your drive. Anything unmarked is optional.

This is meant to be a no-frills guide with little extra info.

Step 1: Download and install EAC

Download the installer and fire it up.

🐼 Exact Audio Copy 1.0beta3 Setup						
Choose Components Choose which features of Exact Audio Copy 1.0beta3 you want to install.						
Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.						
Select components to install:	 EAC freedb Metadata Plugin GD3 Metadata Plugin CDRDAO FLAC AccurateRip CTDB Plugin 	Description Position your mouse over a component to see its description,				
Space required: 15.7MB						
Nullsoft Install System v2,45 —	< Back	Install Cancel				

Eventually you'll get to a screen like this. Make sure you install AccurateRip, CDRDAO, CTDB, and freedb as a bare minimum. FLAC will be useful as well if you don't have it separately installed. GD3 is only useful if you want to pay for metadata results. I assume you don't.



When you first start EAC, you'll see a screen like this one. Hit "Cancel". Next, put a popular CD into your drive, preferably not one that was recently released (a few months old at least). You'll see a window like the one below appear. If you have an older version of EAC or dBpoweramp installed, it's likely AccurateRip was already configured, and this may not appear.

Configure AccurateRip						
This Audio CD can be used to configure AccurateRip.						
AccurateRip contains CD results from people all over the world!, which are used to indicate if your CD rips are 100% without error (from scratches). Before taking part the CD drive offset must be determined. Visit www.accuraterip.com for more information.						
CD Drive Type: HL-DT-ST - DVDRAM GH24LS50						
Expected Offset: Database [+667 samples]						
Note: If an additional 'Key Disc' is requested, please do not use both discs from a double CD						
Configure AccurateRip now? [will take about 5 seconds]						
Configure Close						

Hit Configure. It may take a few minutes. Hit "Ok" afterward. Once again, if you have an older version of EAC or dBpoweramp installed, it's likely AccurateRip was already configured, and this may not appear.

Step 3: EAC Options

All of the options dialogs can be found from the EAC menu at the top of the screen.



Start with EAC Options. Any tabs not pictured are completely optional settings, or are irrelevant to ripping.

AC options	-					-	? ×
Directo	nies	Wri	te	Interface		Audio Plu	gins
Extraction	General	Tools	Normalize	Filename	Character	Replacements	Catalog
 Fill 0 Syn Del Skip Skip Skip After 15 Loc Extraction Normal Error reaction High 	up missing offset chronize betwee ete leading and l o track extraction o track extraction or each mins k drive tray durin on and compress covery quality	samples with en tracks trailing silent bl n on read or sy n after duration 60 ng extraction sion priority	silence ocks incerrors n longer than mins of extra A higher and sync	Note: for older option here cal in CRC calcuatio	eversions of led "No use ons". Leave t 4 times the drive for	FEAC, there's an e of Null Samples this UNCHECKED realtime	s). read
						ОК	Cancel

Make sure you set the green highlighted settings as shown. If you're using an older version of EAC, make sure "No use of null samples for CRC calculations is UNCHECKED. The rest is optional, choose as you will. Locking the drive tray during extraction isn't a bad idea though.

C options	-				? <mark>></mark>	
Directories	Write		Interface	A	udio Plugins	
Extraction General	Tools	Normalize	Filename	Character Replacem	nents Catalog	
 Use alternate CD play routines Disable 'CD Autostart' for audio and data CDs while EAC running On unknown CDs, automatically access online metadata database open CD information dialog Display times using frames Ask before overwriting files Correct bug of wrong filename order in Windows multiple file dialog Show status dialog after extraction Beep after extraction finished Eject CD after extraction finished 						
			 snace sostari 	toomputor		
	iai compressors		 Testan 			
EAC language selection Use language I Create log file	s always in eng	ish language	English	hate computer	•	
				ОК	Cancel	

These settings are pretty much all optional and self explanatory. I'd recommend using Alternate CD play routines and disabling autostart though.

The "Create log files always in english language" is very important for our international users. This will let you keep EAC's language as your native one, but write the log file in English

EAC options						? ×
Directories	Write		Interface		Audio Plu	Jgins
Extraction General	Tools	Normalize	Filename	Charac	ter Replacements	Catalog
 Retrieve UPC / ISF Use CD-Text inform Create '.m3u' playlis Write m3u play Write m3u play Write m3u play Automatically write Append checksum Convert BMP imag On extraction, start Use It is necessary to response to the second second	RC codes in CUE nation in CUE she st on extraction vlist with extende vlist as UTF8 file status report afte to status report a files automatica external compre 1	i sheet generat eet generation d information (compatible e. er extraction ally to JPG ssors queued i simultaneou nge the numbe indow n (but ask for p advanced feat	tion .g. with Winamp) n the background is external compre er of compression t ermission) tures	ssor threads.	d(s)	
					ОК	Cancel

If your drive is capable of reading UPC/ISRC codes and CD-Text (you can only really figure this out by trial and error), you're welcome to keep the top two options checked. Otherwise, uncheck them.

Other than that, these settings are pretty much ideal. I wouldn't recommend using more than 1 compressor thread even if you have a multicore computer. It doesn't take very long compared to the track extraction anyway. Note that in tests run by punkmeup, disabling the queue of external compressors in the background fixed an issue where EAC was generating WAV files instead of FLAC, so I've made that a required option. It should have no bearing on the rip quality. If rip queueing works for you (it does for me), feel free to leave it enabled.

EAC options						? ×
Directories	Write		Interface		Audio Plu	gins
Extraction General	Tools	lomalize	Filename	Characte	r Replacements	Catalog
🔲 Normalize						
Normalize to 98 🗳 %						
But only if Peak Level is	1					
smaller t	han	85	÷ %			
ro						
greater	han	99	* %			
					ОК	Cancel

Friends don't let friends normalize their EAC rips. Don't ever do it.

EAC options					? ×
Directo	ories	Write	Interface	Audio P	lugins
Extraction	General	Tools Normalize	Filename	Character Replacements	Catalog
Constru	uction of save file	names			
Naming	1 scheme				
%track	nr2% - %title%				
V Us	e various artist na	aming scheme			
&track	.nr2% - %artist% -	%title%			
%title% %artist? %comp %track, %track, %track, %track, %track, %tengt} %lengt %tengt %deun %albun %albun %albun %albun %comn %totalc %cddbj %cddbj %cddbj	% oser% nr1% nr2% nr3% nsec% f title% astist% composer% attist% composer% ninterpret% nent% ds% mber% acks% % ype% d%	 Track title Track artist Track composer Track number (at least 1 Track number (at least 2 Track number (at least 3 Track duration (minutes p Track duration (seconds Release year CD title CD artist CD composer CD composer CD comment Number of CDs in a set Number of the CD within Total number of tracks or ID3 music type freedb ID 	digit) digits) digits) part) part) a set n the CD		
For exa	mple :	(%tracknr2%) %title% - %a	tist%		
E Re	place spaces by	underscores			
				ОК	Cancel

This is the proper way to name tracks. The only difference acceptable here would be perhaps %tracknr2%. %title% if you prefer periods instead of dashes in the filenames. If you need track numbers to go into triple digits for some reason, use %tracknr3% instead.

Naming Convention : %tracknr2% - %title%

Check 'Use Various Artists Naming Scheme' and use : %tracknr2% - %artist% - %title% Don't replace spaces by underscores. It looks ridiculous.

Step 4: Drive Options

0	ptions for drive HL-DT-STDVDRAM GH24LS50							
	Extraction Method Drive Offset / Speed Gap Detection Writer							
	Secure modes							
	Secure mode with following drive features (recommended)							
	Drive has 'Accurate Stream' feature Depends on the Detect Read Features test							
	Drive caches audio data							
	Drive is capable of retrieving C2 error information							
	Paranoid mode (not recommended)							
	Disable CD-ROM drive cache							
	Sunchronized modes							
	Burst modes							
	Burst mode							
	Detect Read Features							
ľ								
	OK Cancel							

Start by hitting "Detect Read Features...". This will actually take a few minutes. The only feature detection that actually matters is Accurate Stream. If your drive can use it, checkmark the setting (most modern drives have Accurate Stream). If it can't, don't.

Even if your drive doesn't cache audio, just do us a favour and leave that checked. Not only will it stop you from having to have each of your uploads rescored by hand, but it doesn't affect the audio quality at all. Yes, the rips take a bit longer with that setting enabled. Go watch TV or something while you wait.

Do not use C2, even if EAC thinks you can. Most drives have terrible C2 error implementation.

Options for drive HL-DT-STDVDRAM GH24LS50						
Extraction Method Drive Offset / Speed Gap Detection Writer						
Drive read command Read command MMC 1 A wrongly chosen extraction command may cause problems on SCSI systems.						
Autodetect read command now						
"Big Endian" byte order (Motorola) This "Big Endian" byte mode is often used on drives from Philips, Grundig, IMS, Kodak, Ricoh, HP, Plasmon and some others. Select this option only if the extracted way file seems to consist of noise!						
Swap channels						
Very few drives will have exchanged stereo channels on extraction.						
Spin up drive before extraction						
Some drives already read data on spin up. This will cause problems on some of these drives, destroying the beginning of an extracted WAV.						
CD-Text Read capable drive						
OK Cancel						

Hit "Autodetect read command now". It shouldn't take long. Leave everything else unchecked unless you're having problems. You can checkmark "CD-Text Read capable drive" if you want to test whether your drive can do it. If it can, great, otherwise, uncheck it. It's unlikely you'll ever use that feature anyway.

Options for drive HL-DT-STDVDRAM GH24LS50	?	×
Extraction Method Drive Offset / Speed Gap Detection Writer		
+bb/ Read sample offset correction value		
Detect read sample offset correction		
Use combined read/write sample offset correction		
0 Combined read/write sample offset correction value		
Overread into Lead In and Lead Out		
Current Speed selection		
Allow speed reduction during extraction		
Use AccurateBin with this drive		
OK (Can	cel

If you did the AccurateRip configuration at the start of this guide, the top half here will be greyed out. If not, you'll need to find your read offset correction from this list. Don't use a combined read/write offset.

If you want to figure out whether your drive needs "Overread into Lead-in and Lead-Out" checked, you can check by temporarily unchecking "Use AccurateRip with this drive". Stick a CD in the drive and hit "Detect read sample offset correction...". If you're just doing this for the Overread, see below:

Originally Posted by blowfish.be

Check "Overread Lead-In and Lead-Out" only if the test result says that your drive can overread from both the Lead-In and Lead-Out, or if it says Lead-Out and your offset correction is positive ,or if it says Lead-In and your offset correction is negative. Otherwise disable (uncheck) it.

Remember to check "Use AccurateRip with this drive" again once you're finished. AccurateRip is always a good idea.

Options for drive HL-DT-STDVDRAM GH24LS50		? X
Extraction Method Drive Offset / Speed Gap Detection	Writer	
Gap/Index retrieval method :	Detection method A	-
Detection accuracy :	Secure	-
	ОК	Cancel

Pretty much every drive should work with the settings shown. If yours stalls on detecting gaps or detects gaps that are obviously wrong (like 30 second gaps on a non-live album), try Detection method B or C. If A, B, and C all fail, you can switch "Secure" to "Accurate" and try again.

Step 5: Metadata Options

Metadata options	EAC CD Burning Guide
Metadata Provider freedb Export	
Selected metadata provider freedb Metadata Plugin	-
Show options of the selected metadata provider	
Options	
freedb metadata plugin	
Written 2009 by Andre Wiethoff This plugin is Public Domain, you can use, modify and copy it as you like!	
Use freedb server http://freedb.freedb.org:80/~cddb.cgi	
Open cover designer after successfull freedb retrieval Ask everytime	•
Search for Lyrics after successfull freedb retrieval Ask everytime	•
	OK Cancel

Here's where you pick your metadata provider. If you did install GD3, it'll be in the list. You can only rip 10 discs before you have to pay for a subscription though. Otherwise, you have a choice between the MusicBrainz plugin (CTDB), freedb plugin and EAC's native freedb support. I'm not really sure what the big difference is, I'm guessing it's the cover+lyrics. Anyway, change those settings above if you wish.

Metadata options	
Metadata Provider freedb Export	
Your e-mail address :	lol@hotmail.com
Freedb server :	http://freedb.freedb.org:80/~cddb/cddb.cgi
	Get active freedb server list
Use Proxy Server for HTTP acce	ess
Proxy Server :	Port :
Use authentication for Proxy Ser	ver
Proxy username :	Proxy password :
On a connection error, retry quer	y using a different server from the server list
	OK Cancel

If you use EAC's native freedb instead, the settings should look like this. Make sure you put an email at the top, it doesn't need to be real. Hit "Get active freedb server list". Then checkmark the last option.

Step 6: Compression Options

Compression options	? <u>×</u>
Waveform External Compression Comment ID3 Ta	ag
	-
Use external program for compression	
Parameter passing scheme :	User Defined Encoder 🔹
Use file extension :	.flac
Program, including path, used for compression	1
C:\Program Files (x86)\FLAC\flac.exe	Browse
Additional command-line options :	-8 -V -T "ARTIST=%artist%" -T "TITLE=%title%" -
Bit rate : 102	4 kBit/s ▼
Delete WAV after compression	 High quality
🔲 Use CRC check	Cow quality
Add ID3 tag	
Check for external programs return code	
Test encoder	
	OK Cancel

Set up this tab exactly as shown. You'll have to browse to the path where you have flac.exe, if you installed it with EAC it's in C:\Program Files (x86)\Exact Audio Copy\FLAC\flac.exe. If you installed it separately it's wherever you installed it. The bitrate and high/low quality have no effect on the rip.

The commandline parameters have changed in this version, so this will look new to most of you. The commandline recommended for optimal completeness is this:

```
-8 -e -p -V -T "ARTIST=%artist%" -T "TITLE=%title%" -T "ALBUM=%albumtitle%" -T "DATE=%year%" -T "TRACKNUMBER=%tracknr%" -T "GENRE=%genre%" -T "PERFORMER=%albuminterpret%" -T "COMPOSER=%composer%" %haslyrics%--tag-from-file=LYRICS="%lyricsfile%"%haslyrics% -T "ALBUMARTIST=%albumartist%" -T "DISCNUMBER=%cdnumber%" -T "TOTALDISCS=%totalcds%" -T "TOTALTRACKS=%numtracks%" -T "COMMENT=%comment%" %source% -o %dest%
```

It takes no extra effort on your part, just copy and paste that into the additional commandline options and you're done.

Note: the %comment% function is broken in version 1.0b2 (it returns the track CRC). Use something like -T "COMMENT=EAC V1.0 beta 2, Secure Mode, Test & Copy, AccurateRip, FLAC -8" instead.

Also, as of Beta 3 you may use the %tracknr1% variable instead of %tracknr% if you would like to have no leading zeroes in the track number field (like XLD does). tracknr1 will use, for example, '1' instead of '01'.

A note on ripping to lossy formats like MP3: So first off, this is a complete waste of time. In most cases, EAC is overkill for lossy files, and takes far too long to rip the CD to be practical. Your best bet is to rip once to FLAC and then use a program like dBpoweramp to convert that rip to the other formats. Even if you don't need a FLAC it'll still be much faster to rip using any other program, and won't produce an audibly different result unless your CD has skips and bad scratches.

However, the MP3 and Ogg command lines are included below. You'll need to browse to LAME.exe or oggenc2.exe, and set the extension to .mp3 or .ogg, respectively. The other settings remain the same, bitrate is still irrelevant.

V0 MP3:

-V 0 --vbr-new --add-id3v2 --ignore-tag-errors --ta "%artist%" --tt "%title%" --tg "%genre%" --tl "%albumtitle%" --ty "%year%" --tn "%tracknr%" %source% -0 %dest%

V2 MP3:

-V 2 --vbr-new --add-id3v2 --ignore-tag-errors --ta "%artist%" --tt "%title%" --tg "%genre%" --tl "%albumtitle%" --ty "%year%" --tn "%tracknr%" %source% -0 %dest%

320 kbps MP3:

-b 320 -h --add-id3v2 --ignore-tag-errors --ta "%artist%" --tt "%title%" --tg "%genre%" --tl "%albumtitle%" --ty "%year%" --tn "%tracknr%" %source% -o %dest%

q8 Ogg:

-q 8 -a "%artist%" -t "%title%" -l "%albumtitle%" -d "%year%" -N "%tracknr%" -G "%genre%" %source% -o %dest%

Compression options			? ×
Waveform External Compression Com	ment ID3 Tag		
	18 2		
Write ID3 V2 tags, using a p	adding of	4 🚍 kB	
□ Hee ID2)/11 tage instead of	(D2)(1.0 boss		
Use ID3V2.4.0 tags instead	of ID 3V2.3.0 tags		
Use track format xx/xx in ID3	W2 tags (e.g. 01/16)		
Use unsyncronization schem	e on ID3V2 tags		
Write ID3V2 tags using UTF	16		
Add cover image to ID3V2 ta	ig		
🔽 Write cover image into extra	ction folder		
Namening scheme:	%albumartist% - %albumtitle%		
Name the cover whatever y options.	ou like. Mouseover the box for more naming		
		ОК	Cancel

Leave everything unchecked except the last option.

Congrats! EAC is now properly set up! You may wish to save your settings in a profile by hitting "New" at the bottom of the screen. However, unless you're changing your settings frequently there's no need, EAC will remember all of this on next launch regardless.

EAC Ripping Process

Step 7: Tagging

🐼 Exact Au	idio Copy								
EAC Edit	Action	<u>D</u> atabase <u>T</u> ools <u>H</u> elp 24LS50 YP01 Adapter: 1 ID: 1 ▼	CD Title	Collider		Year	2011		CD Compos
> 11	a (44	4 Pr Pr 🗧 🎎 - 🕬 📘	CD Artist	Sam Ro	berts Band	Genre	Rock	-	Comment
	_	** *	CD Performer			freedb	Rock	•	
	Select/I	Deselect all							
	Track	Title	Artist		Composer	Lyrics	Start	Lengt	h
	▼ ==1	The Last Crusade	Sam Robert	ts Band		Add	0:00:00.00	0:04:18	.46 0:0
	V 🖬 2	Without a Map	Sam Robert	ts Band		Add	0:04:18.46	0:04:06	.88 0:0
	V 🖬 3	Let It In	Sam Robert	ts Band		Add	0:08:25.34	0:04:19	.18 0:0
	V 📲 4	Graveyard Shift	Sam Robert	ts Band		Add	0:12:44.53	0:04:27	.84 0:0
	V 📲 5	No Arrows	Sam Robert	ts Band		Add	0:17:12.37	0:04:27	.26 0:0
📻 IMG	V 📬 6	Longitude	Sam Robert	ts Band		Add	0:21:39.64	0:03:19	.76 0:0
500	7	Streets of Heaven (Promises, Promises)	Sam Robert	ts Band		Add	0:24:59.40	0:04:26	.50 0:0
	V 🗱 8	Sang Froid	Sam Robert	ts Band		Add	0:29:25.90	0:03:30	.74 0:0
c, URI	V 📬 9	Twist the Knife	Sam Robert	ts Band		Add	0:32:56.65	0:04:13	.82 0:0
	V 📬 10	I Feel You	Sam Robert	ts Band		Add	0:37:10.48	0:05:17	.62 0:0
9	🗸 🗊 11	The Band vs the World	Sam Robert	ts Band		Add	0:42:28.10	0:04:10	.88 0:0
	V 📲 12	Partition Blues	Sam Robert	ts Band		Add	0:46:38.98	0:04:12	.84 0:0
	🔽 📬 13	Tractor Beam Blues	Sam Robert	ts Band		Add	0:50:51.82	0:04:57	.26 0:0
	IY								
Audio CD in	n drive	13 Tracks 0:55:49.09 h:m:s.m	563.41	MB / 418	.63 MB FLAC 8	(Complete)		oad Sa	ve New

So now let's look at the main window. Be sure everything is named correctly here, as these will be the tags on your ripped files. If you're ripping a classical CD, you may wish to fill in the Composer/Performer fields.

Drag a cover image into the EAC window. I think ~500x500 is a decent size in most cases. Google images is your friend here.

If you're ripping a box set, you may wish to use the options under the cover image, otherwise leave them all as "1".

Finally, if you want to add lyrics to the tracks, use the "Lyrics" button.

Note: I've also highlighted the "New" button where you can save your settings. This is not a necessary step each time you rip.

Step 8: Gap Detection and Cuesheets

∞ Exact Au	dio Co	ору									
EA <u>C</u> <u>E</u> dit	Acti	on <u>D</u> atabase <u>T</u> ools <u>H</u>	<u>H</u> elp		_						
HL-DT-STD	1	Copy Selected Tracks		•	1	Collider			Year	2011	
		Test & Copy Selected Tracks				Sam Roberts Band			Genre	Rock	
11 1	1	Copy Range		•	mer		freedb		freedb	Rock	
		Test Selected Tracks									
	Copy Image & Create CUE Sheet			×	mpose	r	Lyrics	St	tart	Length	G
		Test & Copy Image & Create CUE Sheet			· · ·	Add		0:00:00.00		0:04:18.46	0:00
		Catalog Selected Tracks		•			Add	0:04:18.46		0:04:06.88	0:00
		Copy Selected Tracks Index-Based					Add	0:08	:25.34	0:04:19.18	0:00
۵.	Detect Gaps		F4	#1		Add	0:12	:44.53	0:04:27.84	0:00	
		Test Gaps On Silence		F3			Add	0:17	:12.37	0:04:27.26	0:00
		Create CUE Sheet		•	c	urrent Gap	Settings	1 0.01	20.64	0 00 10 70	
		Leave Out Gaps			Single WAV File				Al	t+S	
	\checkmark	✓ Append Gaps To Previous Track (default)			N	lultiple WA	V Files With Ga	ps (N	oncompl	iant) #2	
60	Append Gaps To Next Track Check this first			Multiple WAV Files With Leftout Gaps				Alt	+М		
_	V	12 Partition Blues	Sam Roberts Bar	nd	N	lultiple WA	V Files With Co	rrected	Gaps	Alt	+0

The pre-rip stuff happens here. Make sure "Append Gaps to Previous Track (default)" is checked. It should be. Next, hit the options in the order shown.

First, hit "Detect Gaps". This is very important, your rip will fail the logchecker if you do not complete this step. If the first track is highlighted in red, you have a hidden track. You'll want to look at this section of the blowfish.be guide.

Next, go to Create CUE Sheet -> Multiple WAV Files With Gaps... (Noncompliant). This is usually where I create the folder for ripping as well. Do NOT rip your tracks to any directory containing your name. You should NEVER edit a log for any reason, especially now that we have checksums. A simple C:\EAC Rips is fine.

I name my directories as follows: Artist - Album (Year) [Format] {Extra}

So for example, with the album in the screenshots, it'd be

Sam Roberts Band - Collider (2011) [FLAC] {UMC 0252764577}

However, as long as it contains the album name and no nested folders (don't do \Artist\Album\), you're fine by the rules here.

Anyway, make the folder, save the .cue file into it. I usually just name mine Noncompliant.cue, it doesn't really matter.

Step 9: Ripping

😔 Exact Aud	dio Co	ру				-
EA <u>C</u> <u>E</u> dit	Acti	on <u>D</u> atabase <u>T</u> ools <u>H</u> elp		_		
HL-DT-STDV		Copy Selected Tracks	•	Collider		
	Test & Copy Selected Tracks			Uncompre	F6	
► 11 a		Copy Range	•	Compress	Shift+F6	
		Test Selected Tracks	F8			
		Copy Image & Create CUE Sheet	•		~	
		Test & Copy Image & Create CUE Sheet	+		Compo	oser
		Catalog Selected Tracks	+	Roberts Band		
		Copy Selected Tracks Index-Based	•	Roberts Band		
			54	Roberts Band		
		Detect Gaps	F4	Roberts Band		
		Test Gaps On Silence	F3	Roberts Band		_
		Create CUE Sheet	•	Roberts Band		
		Leave Out Gaps		Roberts Band		
c) WRI	\checkmark	Append Gaps To Previous Track (default)		Roberts Band		
\$	Append Gaps To Next Track			Roberts Band		
9		Append oups to next fluck		Roberts Band		

Finally, the rip itself! Make sure all the tracks are checkmarked in the main window unless there are some you don't want to rip.

Test & Copy -> Compressed.

Depending on your drive and whether or not the CD is scratched, this could take anywhere from ten minutes to four hours. Be patient.