

NAME

cue2ddp – Create a Red Book DDP 2.00 master from an audio CD cue sheet

SYNOPSIS

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cue2ddp [-ct] [-m master-id] cuesheet [ddpdirectory]
cue2ddp man [--help|--version]
```

DESCRIPTION

The cue2ddp command acts as an audio CD image converter, parsing a *cuesheet* and writing a DDP 2.0 fileset to *ddpdirectory*. This directory must already exist and files therein will be overwritten without further notice, if necessary. With no *ddpdirectory* specified, the program exits after parsing the cue sheet, this can be used for syntax checking. Parsing is done fairly strictly with the intention to rather exit with an error than end up with a DDP that's based on guesses. Furthermore parser warnings will be issued in non-fatal situations, to give as detailed a feedback as possible.

CD text is supported with the standard TITLE, PERFORMER, and SONGWRITER cue sheet commands, the text entries are expected to be encoded ISO 8859-1 (Latin1), the language code will be set to English.

OPTIONS**-c --add-cuesheet"**

Embed a cue sheet within the DDP fileset. The DDP specification allows for including text files with arbitrary content as part of the DDP fileset, they will not affect the disc replication but can be used to transport commentary notes on a project. cue2ddp uses such a file to include a cue sheet, thus allowing many CD burning applications and some music playback software to read directly from the DDP.

-m master-id, --master-id=master-id

Set the master identifier; this is an ASCII string of 48 characters maximum, which can be used to give the master a unique name, but does not end up on the manufactured CD. Note that since the file names within a DDP fileset can not be chosen by the user and plants often don't like the DDP files in a sub-directory, this is the only way to reliably identify a master.

-t, --add-cdtext

Include CD Text in the DDP fileset. When this flag is set but no CD text fields are found in the cue sheet, a warning will be issued.

--help Print short help and exit.**--version**

Print version information and exit.

DISC DESCRIPTION PROTOCOL (DDP)

DDP was invented by Doug Carson (DCA, Inc.) as a complete description of the input media for glass mastering of CD and DVD. The following notes refer to DDP describing a Red Book audio CD, a format used by many audio mastering engineers for sending their finished projects out to a disc manufacturer. While 8mm Exabyte tape has for a long time been the preferred media for delivering DDP, hard disk, DVD-R, and FTP dominate today's workflow. Some people prefer to use the term DDPi for a DDP written to random-access media (instead of data tape).

DDP for Red Book audio CD is available in version 1.00, 1.01, and 2.00, where the difference from a user's perspective can be summarized in the simple observation, that DDP 2.00 allows for CD text, while DDP 1.00 and 1.01 do not.

A DDP 2.0 written by cue2ddp includes the following files:

DDPID, DDPMS

Some general metadata and a table of contents for this DDP.

SD PQ subcode data, i.e. track and index positions, ISRCs, UPC/EAN, track flags.

IMAGE.DAT

Main data as raw audio file, 44.1 kHz, 16 bit little endian, stereo with samples interleaved.

CDTEXT.BIN (optional)

CD text information in a pre-encoded binary format with embedded checksums.

IMAGE.CUE (optional)

A cue sheet to accompany the data file.

CHECKSUM.MD5

MD5 checksums of all files, this is not part of the DDP, but can be useful to ensure data integrity.

CUE SHEET COMMANDS

Cue sheets were introduced by Golden Hawk Technology for their CDRwin CD burning software, the "official" description is found in the appendix of CDRwin's user manual ("CDRwin.pdf"). Supported commands are:

REM A comment, the rest of the line will be ignored.

CATALOG

Only in the global section, assigns the catalog number. This is an EAN13 or—in the U. S.—a UPC-A. In the latter case a leading Zero needs to be added to make it 13 digits. Cue2ddp will validate the check digit of those catalog numbers.

FILE All audio and pre-gaps are required to be in one file, supporting the two file types 'BINARY' and 'WAVE'. In both cases the audio must be 44.1 kHz, 16 bit little endian, and stereo with interleaved samples. Please note that in the case of raw audio files (file type 'BINARY'), cue2ddp cannot check for the appropriate format. Filenames may include relative or absolute paths, but note that the latter usually causes trouble when moving or copying the image to another location in the file system.

If the pre-gap before the first track start is not included in the audio file, the mandatory two seconds of silence will be added to the DDP. The size of the audio file determines the end of the CD program, which has to be at a CD sector boundary (1/75th of a second), or otherwise causes an error.

TRACK

Start a track section, the only track type supported is AUDIO

ISRC The International Standard Recording Code.

FLAGS

Track flags supported are 'PRE', 'DCP', '4CH', 'SCMS'. Use flags only if you know exactly, what you are doing, they are very rarely used these days.

INDEX

Set the position of a pre-gap start (INDEX 00), a track start (INDEX 01), and further sub-indexes (INDEX 01-99), where only INDEX 01 is required for each track.

TITLE, PERFORMER, SONGWRITER

Set a CD text field, either in the global section for the whole disc or within a track section. Enclose the text in quotes, when it contains spaces. The encoding is assumed to be ISO 8859-1 (Latin1), multi-byte character sets are not supported, the language code will always be set to English.

The **PRE-GAP**, **POST-GAP**, and **CDTEXTFILE** commands are not supported.

SEE ALSO

ddpinfo(1), dvdtape(1).

AUTHOR

Written by Andreas Ruge.

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