NAME

pri − convert and modify PCE raw image files

SYNOPSIS

pri *[options] [input-file] [options] [output-file]*

DESCRIPTION

pri(1) is used to modify and convert PCE raw image files.

OPTIONS

-c, --cylinder *cyl1[-cyl2]*
Select a range of cylinders.

-e, --edit *what val*
For all selected tracks, set track attribute *what* to *val*. For boolean attributes, a value of 0 disables the attribute and any other value enables it. Recognized attributes are:

clock The bit clock rate.

data Initialize the track using *val*.

readonly
Set the read-only attribute for the image.

size Set the track size in bits.

woz-cleaned
Set the cleaned attribute for WOZ images.

woz-track-sync
Set the track sync attribute for WOZ images.

-f, --info
Print information about the current image or the next image loaded.

-h, --head *head1[-head2]*
Select a range of heads.

-i, --input *filename*
Load an image from *filename*.

-I, --input-format *format*
Set the input file format to *format*. Valid formats are:

pbit The PBIT file format. This has been superseded by PRI.

pri The native PCE raw image file format.

tc Transcopy dump format. Support for this format is highly experimental.

woz The Applesauce WOZ disk image format.

-l, --list-short
List all tracks in the current image or in the next image loaded. Using this options prints one line per track.

-L, --list-long
List all tracks in the current image or in the next image loaded.

-m, --merge *filename*
Load an image from *filename* and copy all tracks that are not in the current image into the current image.

-M --merge-overwrite *filename*
Load an image from *filename* and copy all tracks into the current image. Tracks that exist in both images will be overwritten in the current image.

-o, --output *filename*
Set the output file name. Before exiting, the current image will be written to this file.

-O, --output-format *format*
Set the output file format to *format*. See the *-I* option for a list of valid formats.

-p, --operation *name [arg...]*
Perform an operation on the current image. Valid operations are:

comment-add *text*
Add *text* to the image comment.

comment-load *filename*
Load the image comment from file *filename*.

comment-print
Print the current image comment.

comment-save *filename*
Save the current image comment to *filename*.

comment-set *text*
Set the image comment to *text*.

decode *type filename*
Decode the image and save it as a psi sector image to *filename*. Valid decode types are:

auto Try to decode each track as ibm-mfm, ibm-fm and mac-gcr.

ibm-fm
IBM FM

mac-gcr
Apple Macintosh GCR

ibm-mfm
IBM MFM

delete Delete all selected tracks.

double-step
Remove odd numbered tracks.

double-step-even
Remove even numbered tracks.

event-add *type position value*
Add a new event of type *type* at bit position *position* with value *value* on all selected tracks. The event type can be specified as a numerical value or as a type name.

event-clear
Clear all events of all types from the selected tracks.

event-del *type (@index1[-index2] | offset1[-offset2] |* **all***)*
Delete events from the selected tracks. The type can be specified as a numerical value, as a type name or as **all**. The range specifies a range of event indices as reported by **event-list**, a range of bit offsets, or **all**.

event-list *type (@index1[-index2] | offset1[-offset2] |* **all***)*
List events from the selected tracks. The type can be specified as a numerical value, as a type name or as **all**. The range specifies a range of event indices, a range of bit offsets, or **all**.

encode *type filename*
Load a psi sector image from *filename* and encode it. Valid encode types are:

auto Automatically determine the encoding for each track.

ibm-fm
IBM FM

mac-gcr
Apple Macintosh GCR

ibm-mfm
IBM MFM

half-rate
Remove all odd-numbered bits to create a new track with half the data rate.

half-step
Duplicate all tracks. This is the reverse of double-step.

info Print information about the current image (same as **-f**).

mac-align
This a synonym for **mac-align-sector**.

mac-align-sector
Align the lowest numbered sector with the index.

mac-align-sync
Align the longest sync sequence with the index.

mfm-align-am *what pos*
Rotate the track such that the first address mark of type *what* on the track is at bit position *pos*. Possible values for *what* are:

all All address mark types

iam Index address marks

idam ID address marks

dam Data address marks

Multiple types can be combined by joining them with a '+' or a '-' sign. For example, the type **all-iam** specifies all address mark types except index address marks.

new Create new tracks.

rotate *cnt*
Rotate all selected tracks left by *cnt* bits. If *cnt* is negative, the track is rotated right.

rotate-angle *angle*
Rotate all selected tracks left by *angle* degrees. If *angle* is negative, the track is rotated right.

save *filename*
Save all selected tracks to *filename*. The contents of the tracks are written sequentially to the file.

weak-clean
Clean up the weak bit events on all selected tracks.

weak-close *max*
If two weak bits are separated by up to *max* non-weak bits, turn all non-weak bits in between into weak bits.

weak-detect *max*
Detect weak bits. All zero bits that are preceded by at least *max* zero bits are mared as weak.

weak-expand *left right*
Expand runs of weak bits by adding *left* weak bits before every weak bit and *right* weak bits after every weak bit.

weak-load *filename*
Load the weak bit mask of all selected tracks from *filename*. The weak bit masks are of the same size as the track data.

weak-open *max*
Remove all runs of up to *max* weak bits.

weak-save *filename*
Save the weak bit mask of all selected tracks to *filename*. The weak bit masks are of the same size as the track data.

weak-set *val*
Set bits that are marked as weak to *val* which can be one of the following:

0 Set bits to 0

1 Set bits to 1

flip Invert bits

random
Set bits to a random value

-r, --data-rate *rate*
Set the default data rate. The default is 500000. If *rate* is greater than 1000 it is assumed to be in bits per second, otherwise it is assumed to be in kbits per seconds.

-s, --set *parameter value*
Set a parameter value. Recognized parameters are:

mfm-auto-gap3 *boolean*
Automatically set the GAP3 length. The default is true.

mfm-clock *integer*
Set the MFM clock rate (this is twice the data rate). The default is 500000, suitable for double density disks.

mfm-iam *boolean*
If false, skip the index address mark. The default is false.

mfm-gap1 *integer*
Set the GAP1 length in bytes. The default is 0.

mfm-gap3 *integer*
Set the GAP3 length in bytes. The default is 80.

mfm-gap4a *integer*
Set the GAP4A length in bytes. The default is 96.

mfm-min-size *integer*
Set the minimal sector size when decoding MFM.

mfm-nopos *integer*
If set to a non-zero value, ignore the PSI sector positions when encoding MFM tracks.

mfm-track-size *integer*
Set the track size in bits.

fm-auto-gap3 *boolean*
Automatically set the GAP3 length. The default is true.

fm-clock *integer*
Set the FM clock rate (this is twice the data rate). The default is 250000, suitable for single density disks.

fm-iam *boolean*
If false, skip the index address mark. The default is false.

fm-gap1 *integer*
Set the GAP1 length in bytes. The default is 26.

fm-gap3 *integer*
Set the GAP3 length in bytes. The default is 27.

fm-gap4a *integer*
Set the GAP4A length in bytes. The default is 40.

fm-track-size *integer*
Set the track size in bits.

text-align *boolean*
If true, bit-align the text output to the first address mark on a track. The default is true.

-t, --track *c h*
Select tracks. This is the same as using the **-c** and **-h** options.

-v, --verbose
Enable verbose operation.

-x, --invert
Invert the selection.

-z, --clear
Clear the selection.

--help Print usage information.

--version
Print version information.

SEE ALSO

pce-ibmpc(1), **pce-macplus**(1), **pce-img**(1), **psi**(1)

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