

NAME

ra_bmp - convert RADIANCE picture to/from Windows BMP image

SYNOPSIS

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ra_bmp [ -b ] [ -g gamma ] [ -e spec ] [ -p xr yr xg yg xb yb xw yw ] [ [ input ] - [ output ] ]
ra_bmp -r [ -g gamma ] [ -e +/-stops ] [ [ input ] - [ output ] ]
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DESCRIPTION

Ra_bmp converts between RADIANCE and a Windows BMP image. During forward conversion, the *-b* option produces 8-bit grayscale output rather than 24-bit RGB. The *-g* option specifies the exponent used in monitor gamma correction; the default value is 2.2. The *-e* option specifies a tone-mapping method or exposure compensation. If the argument is one of the special words "auto", "human", or "linear", the image will be tone-mapped with histogram adjustment, human vision simulation, or an averaged linear exposure, respectively. (These words may be abbreviated by one or more letters.) Otherwise, the exposure specification is interpreted as a linear compensation value in integer f-stops, which must be preceded by a '+' or '-'. The CRT color output primaries may be specified with the *-p* option.

The *-r* option invokes a reverse conversion, from a Windows BMP image to a RADIANCE picture. Tone-mapping and monitor primaries are not supported for reverse conversion.

Ra_bmp can accept 16-bit or color-mapped BMP files on input, but cannot not produce them on output.

A hyphen ('-') may be specified to indicate standard input for either forward or reverse conversion so that an output file may be specified. If the BMP input is taken from the standard input or sent to the standard output without tone-mapping, then the scanlines may be reversed from their usual ordering. Reversed scanlines sometimes causes difficulties for programs attempting to interpret the resulting RADIANCE picture or BMP image, which may be rejected or displayed inverted.

NOTES

Hyperspectral Radiance pictures (.hsr files) are converted to approximate RGB pixels. However, the colors may not be very accurate. Pass the HSR picture through *rcomb(1)* first if greater color fidelity is required.

AUTHOR

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SEE ALSO

pfilt(1), *ra_ppm(1)*, *ra_pr(1)*, *ra_pr24(1)*, *ra_t8(1)*, *ra_t16(1)*, *ra_tiff(1)*, *rcomb(1)*, *ximage(1)*