# TIFFDITHER

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## NAME

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|  | tiffdither − convert a greyscale image to bilevel using dithering |

## SYNOPSIS

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|  | **tiffdither** [ *options* ] *input.tif output.tif* |

## DESCRIPTION

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|  | *tiffdither* converts a single channel 8-bit greyscale image to a bilevel image using Floyd-Steinberg error propagation with thresholding. |

## OPTIONS

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|  | **−c** |  | Specify the compression to use for data written to the output file: **none** for no compression, **packbits** for PackBits compression, **lzw** for Lempel-Ziv & Welch compression, **zip** for Deflate compression, **g3** for CCITT Group 3 (T.4) compression, and **g4** for CCITT Group 4 (T.6) compression. By default *tiffdither* will compress data according to the value of the *Compression* tag found in the source file. |  |

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|  | The CCITT Group 3 and Group 4 compression algorithms can only be used with bilevel data.  Group 3 compression can be specified together with several T.4-specific options: **1d** for 1-dimensional encoding, **2d** for 2-dimensional encoding, and **fill** to force each encoded scanline to be zero-filled so that the terminating EOL code lies on a byte boundary. Group 3-specific options are specified by appending a ‘‘:’’-separated list to the ‘‘g3’’ option; e.g. **−c g3:2d:fill** to get 2D-encoded data with byte-aligned EOL codes.  LZW compression can be specified together with a *predictor* value. A predictor value of 2 causes each scanline of the output image to undergo horizontal differencing before it is encoded; a value of 1 forces each scanline to be encoded without differencing. LZW-specific options are specified by appending a ‘‘:’’-separated list to the ‘‘lzw’’ option; e.g. **−c lzw:2** for LZW compression with horizontal differencing. |

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|  | **−f** |  | Specify the bit fill order to use in writing output data. By default, *tiffdither* will create a new file with the same fill order as the original. Specifying **−f lsb2msb** will force data to be written with the *FillOrder* tag set to LSB2MSB , while **−f msb2lsb** will force data to be written with the *Fill- Order* tag set to MSB2LSB . |  |
|  | **−r** |  | Make each strip have no more than the given number of rows. |  |
|  | **−t** |  | Set the threshold value for dithering. By default the threshold value is 128. |  |

## NOTES

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|  | The dither algorithm is taken from the **tiffmedian**(1) program (written by Paul Heckbert). |

## SEE ALSO

|  |  |
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|  | **pal2rgb**(1), **fax2tiff**(1), **tiffinfo**(1), **tiffcp**(1), **tiff2bw**(1), **libtiff**(3TIFF)  Libtiff library home page: **http://www.simplesystems.org/libtiff/** |