

Adobe Photoshop 2.0 File Format

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Photoshop format was designed to be fast and easy to read and write. Thus it is a very simple, uncompressed format.

The file type code is '8BIM'.

The file's data fork contains raw image data, in non-interleaved order. No pad bytes are used, except in Bitmap mode (where each line is padded to an even number of bytes).

The rest of the information on the file is stored in resources of type '8BIM' in the file's resource fork. Most of the resources are optional, and if omitted, Photoshop will use reasonable default values.

Resource #1000: (Required)

This resource is 10 bytes long, containing 5 short integers. In order, they are: channels, rows, columns, depth, and mode.

"Channels" is the number of channels in the image, including alpha channels. (Range: 1 to 16)

"Rows" is the height of the image in pixels. "Columns" is the width of the image in pixels. (Range: 1 to 30000).

"Depth" is number of bits per pixel per channel. This is 1 for Bitmap mode images, and 8 for all other modes.

"Mode" indicates the mode of the image. Defined values are: 0 = Bitmap, 1 = Gray Scale, 2 = Indexed Color, 3 = RGB Color, 4 = CMYK Color, 5 = HSL Color, 6 = HSB Color, 7 = Multichannel, 8 = Duotone.

Resource #1001: (Optional)

The standard Macintosh 120 byte print record.

Resource #1003: (Required for Indexed Color Images)

Contains the indexed color table. It is 768 bytes long. The order is 256 red values, 256 green values, and 256 blue values.

Resource #1005: (Optional)

Resolution information. Format is:

```
ResolutionInfo = RECORD
    hRes: Fixed;
    hResUnit: INTEGER;
    widthUnit: INTEGER;
    vRes: Fixed;
    vResUnit: INTEGER;
    heightUnit: INTEGER;
END;
```

hRes and vRes are always stored in units of pixels/inch. hResUnit and vResUnit are 1 if the resolution should be displayed in pixel/inch, or 2 if it should be displayed in units of pixels/cm.

widthUnit and heightUnit are 1 for inches, 2 for cm, 3 for points, 4 for picas, or 5 for columns.

Resource #1008: (Optional)

The caption. A Pascal format string with maximum length of 255.

Resource #1018: (Required for Duotone mode images)

Duotone specification. Internal format is not documented, treat as a black box.

Resources #2000-2999: (Optional)

Path resources. See separate documentation.