

**NAME**

**mmpfb** – creates single-master fonts from multiple master fonts

**SYNOPSIS**

**mmpfb** [OPTIONS...] *font*

**DESCRIPTION**

**Mmpfb** creates a normal, single-master PostScript font from a multiple master font by interpolation. You pass it a PFB or PFA font and options specifying the design point you want; it writes the resulting PFB or PFA font to the standard output.

The fonts **mmpfb** creates are interpolated at a low level to remove multiple master instructions from individual characters. Therefore, they can be used by programs that don't normally understand multiple master fonts, like **ps2pk**(1).

**Mmpfb** supports fonts with intermediate masters, like Adobe Jenson and Kepler. It can also create AMCP (Adobe Multiple Master Conversion Program) files for use by **mmafm**(1); see **--amcp-info** below.

The *font* argument is either the name of a PFA or PFB font file, or a PostScript font name. If you give a font name, **mmpfb** will find the actual outline file using the PSRESOURCEPATH environment variable. This colon-separated path is searched for 'PSres.upr' files, an Adobe method for indexing PostScript resources.

You can also give the name of a multiple master font instance, like 'MinionMM\_367\_400\_12\_'. **Mmpfb** will parse the font name and create that instance for you. 'PSres.upr' files must be set up for this to work.

**EXAMPLE**

```
% mmpfb --weight=400 --width=600 MyriadMM.pfb > MyriadMM_400_600_.pfb
```

**OPTIONS**

Long options may be abbreviated to their unique prefixes.

**--output=***file*, **-o** *file*

Send output to *file* instead of standard output.

**--pfb**, **-b**

Output a PFB font. This is the default.

**--pfa**, **-a**

Output a PFA font.

**--amcp-info**

Do not create a font; instead, output an AMCP file for use by **mmafm**(1). A message is printed if the font doesn't have intermediate masters, in which case no AMCP file is necessary.

**--weight=***N*, **-w** *N*

Set the weight axis to *N*.

**--width=***N*, **-W** *N*

Set the width axis to *N*.

**--optical-size=***N*, **-O** *N*

Set the optical size axis to *N*.

**--style=***N*

Set the style axis to *N*.

**--1=***N* (**--2=***N*, **--3=***N*, **--4=***N*)

Set the first (second, third, fourth) axis to *N*.

**--precision=***N*, **-p** *N*

Set the output precision to *N*. Higher values mean the control points in the output font will be more exactly aligned; lower values (1 or 2) create smaller output font files, and are close enough for most purposes. A precision of *N* means that each point will be within 1/*N* font units of the exact interpolated value. (A font unit is generally 1/7200 inch for a 10-point font.) The default is 5.

**--subrs=*N***

Limit the output font to at most *N* subroutines. 256 is a good value for *N*.

**--no-minimize**

Do not minimize the output font definition. By default, **mmpfb** removes extra PostScript code and dictionary definitions from the font. Supply the **--no-minimize** option to avoid this behavior.

**TROUBLESHOOTING**

The "IBM" Type 1 font interpreter shipped as part of the X font server and **ps2pk** (among others) is inappropriately strict about PostScript code embedded in a font. The **--minimize** option (now the default) fixes this problem.

Some versions of Adobe Acrobat Distiller may report "Warning: unable to embed font X. Invalid character outline data" when distilling an instance generated by **mmpfb**. This is due to a limitation in the number of font subroutines Distiller can accept. (Multiple master fonts, and the single-master fonts generated by **mmpfb**, tend to have a lot of subroutines.) Try limiting the number of subroutines in the generated font with the **--subrs** option.

**SEE ALSO**

**mmafm**(1)

**DIAGNOSTICS**

reducing *font* to minimum number of subroutines (*N*)

You tried to reduce the number of subroutines to less than *N* using the **--subrs** option, but the font needs at least *N* to function. The output font will have *N* subroutines.

**AUTHOR**

Eddie Kohler, kohler@cs.ucla.edu

The latest version is available from:

<http://www.lcdf.org/type/>

Thanks to Melissa O'Neill <oneill@cs.sfu.ca> for suggestions and patient debugging.