

**NAME**

t1disasm – disassemble PostScript Type 1 font

**SYNOPSIS**

**t1disasm** [*input* [*output*]]

**DESCRIPTION**

**t1disasm** disassembles Adobe Type 1 font programs in either PFA (hexadecimal) or PFB (binary) formats into human-readable form. If the file *output* is not specified output goes to the standard output. If the file *input* is not specified input comes from the standard input.

**t1disasm** performs eexec and charstring decryption as specified in the “black book”, *Adobe Type 1 Font Format*. Additionally, the charstring binary tokens are expanded into human-readable text form, using the names given in the black book and later documents describing Type 2 opcodes.

**EXAMPLES**

```
% t1disasm Utopia-Regular.pfb Utopia-Regular.raw
```

```
% t1disasm Utopia-Regular.pfa Utopia-Regular.raw
```

In **Subrs** entries in Utopia-Regular.raw will look like

```
dup 5 {
  8 111 vstem
  -12 128 hstem
  707 -20 hstem
  return
} |
```

and the **CharStrings** entries like

```
/exclam {
  58 242 hsbw
  6 callsubr
  5 4 callsubr
  63 707 rmoveto
  -54 0 -5 -22 4 -45 rrcurveto
  40 -431 rlineto
  29 hlineto
  42 431 rlineto
  4 45 -5 22 -55 0 rrcurveto
  closepath
  6 4 callsubr
  -719 vmoveto
  243 callsubr
  endchar
} |-
```

**SEE ALSO**

**t1asm(1)**, **t1ascii(1)**, **t1binary(1)**, **t1unmac(1)**, **t1mac(1)**

*Adobe Type 1 Font Format* is available free from Adobe as a PDF file:  
[http://partners.adobe.com/asn/developer/PDFS/TN/T1\\_SPEC.PDF](http://partners.adobe.com/asn/developer/PDFS/TN/T1_SPEC.PDF)

*The Type 2 Charstring Format*, also available from Adobe as a PDF file, describes the newer Type 2 operators, which are also used in some multiple-master Type 1 fonts like Adobe Jenson

and Kepler: <http://partners.adobe.com/asn/developer/PDFS/TN/5177.Type2.pdf>

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