

# Algol Revived

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*AlgolRevived* is a revival of the (photo)font *Algol* by Adrian Frutiger whose sole use was for printing ALGOL code in a manual. It is not meant to be a general purpose text font—the spacing is not optimized for that, being designed instead for printing computer code, where each letter should be distinct and text ligatures are banished. It seems to work well with the `listings` package, designed for exactly that purpose. Unusually for such a font, it is not monospaced, though perhaps this is no longer the issue it was in the days of FORTRAN.

Nonetheless, if you don't object to a typewritten appearance, I think the font doesn't really look as bad as you might think it should. (This document uses it as its main text font.)

Both opentype and type1 fonts are provided, along with LaTeX support files. Most characters in the T1 encoding are provided, except for f-ligatures and the Sami characters Eng, eng.

## Use with fontspec

The package provides `algolrevived.fontspec`, with contents:

```
\defaultfontfeatures[algolrevived]
{
Extension = .otf,
UprightFont = AlgolRevived ,
BoldFont = AlgolRevived-Medium ,
BoldItalicFont = AlgolRevived-MediumSlanted ,
ItalicFont = AlgolRevived-Slanted ,
}
```

which allows you to set up your preamble using simply

```
...
\usepackage{fontspec}
\setmainfont{algolrevived} % for use as main font
%\setmonofont{algolrevived} % for use as typewriter font only
...
```

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Creation of this package was spurred by Barbara Beeton's column in a recent TUGBoat, conveying a request from Jacques André for someone to digitize Frutiger's Algol alphabet.

## Use with LaTeX

The package offers OT1, LY1, T1 and TS1 encodings, and sets T1 as the default. To change to LY1, you will need something like

```
\usepackage{algolrevived}
%\usepackage[t1]{algolrevived} for just typewriter
\usepackage[LY1]{fontenc}
```

AlgolRevived-tlf-t1.tfm:

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	` 0	´ 1	^ 2	~ 3	¨ 4	˘ 5	° 6	ˇ 7	"0x
'01x	˘ 8	¯ 9	· 10	¸ 11	¸ 12	13	‹ 14	› 15	"1x
'02x	“ 16	” 17	„ 18	« 19	» 20	– 21	— 22	23	"2x
'03x	24	1 25	¡ 26	27	28	29	30	31	"3x
'04x	32	! 33	" 34	# 35	\$ 36	% 37	& 38	' 39	"4x
'05x	( 40	) 41	* 42	+ 43	, 44	- 45	. 46	/ 47	"5x
'06x	0 48	1 49	2 50	3 51	4 52	5 53	6 54	7 55	"6x
'07x	8 56	9 57	: 58	; 59	< 60	= 61	> 62	? 63	"7x
'10x	@ 64	A 65	B 66	C 67	D 68	E 69	F 70	G 71	"8x
'11x	H 72	I 73	J 74	K 75	L 76	M 77	N 78	O 79	"9x
'12x	P 80	Q 81	R 82	S 83	T 84	U 85	V 86	W 87	"Ax
'13x	X 88	Y 89	Z 90	[ 91	\ 92	] 93	^ 94	_ 95	"Bx
'14x	` 96	a 97	b 98	c 99	d 100	e 101	f 102	g 103	"Cx
'15x	h 104	i 105	j 106	k 107	l 108	m 109	n 110	o 111	"Dx
'16x	p 112	q 113	r 114	s 115	t 116	u 117	v 118	w 119	"Ex
'17x	x 120	y 121	z 122	{ 123	124	} 125	~ 126	- 127	"Fx
'20x	Ā 128	Ą 129	Ć 130	Č 131	Ď 132	Ě 133	Ę 134	Ğ 135	"Gx
'21x	Ł 136	Ł 137	Ł 138	Ń 139	Ń 140	141	Ó 142	Ŕ 143	"Hx
'22x	Ř 144	Ś 145	Š 146	Ş 147	Ť 148	Ť 149	Ů 150	Ů 151	"Ix
'23x	Ÿ 152	Ż 153	Ž 154	Ž 155	IJ 156	İ 157	đ 158	Ş 159	"Jx
'24x	ă 160	ą 161	ć 162	č 163	ď 164	ě 165	ę 166	ğ 167	"Kx
'25x	í 168	ł 169	ł 170	ń 171	ń 172	173	ó 174	ŕ 175	"Lx
'26x	ř 176	ś 177	š 178	ş 179	ť 180	ť 181	ů 182	ů 183	"Mx
'27x	ÿ 184	ż 185	ž 186	ž 187	ij 188	i 189	ı 190	£ 191	"Nx
'30x	À 192	Á 193	Â 194	Ã 195	Ä 196	Å 197	Æ 198	Ç 199	"Ox
'31x	È 200	É 201	Ê 202	Ë 203	Ì 204	Í 205	Î 206	Ï 207	"Px
'32x	Ð 208	Ñ 209	Ò 210	Ó 211	Ô 212	Õ 213	Ö 214	Œ 215	"Qx
'33x	Ø 216	Ù 217	Ú 218	Û 219	Ü 220	Ý 221	Þ 222	ŠS 223	"Rx
'34x	à 224	á 225	â 226	ã 227	ä 228	å 229	æ 230	ç 231	"Sx
'35x	è 232	é 233	ê 234	ë 235	ì 236	í 237	î 238	ï 239	"Tx

'36x	đ <sub>240</sub>	ñ <sub>241</sub>	ò <sub>242</sub>	ó <sub>243</sub>	ô <sub>244</sub>	õ <sub>245</sub>	ö <sub>246</sub>	œ <sub>247</sub>	"Fx
'37x	ø <sub>248</sub>	ù <sub>249</sub>	ú <sub>250</sub>	û <sub>251</sub>	ü <sub>252</sub>	ý <sub>253</sub>	þ <sub>254</sub>	ß <sub>255</sub>	
	"8	"9	"A	"B	"C	"D	"E	"F	

The package has a few options and macros. The option `scaled=.95` or `scale=.95` renders at 95% of the default size, and option `medium` makes medium weight LaTeX's regular weight. Option `tt` species typewriter. The macros `{\sufigures 9}` (same effect as `\textsu{9}`) render the figure as a superscript,<sup>9</sup> and similarly with `\infigures`, `\textin` for inferior figures.

The sty file requires `textcomp` so there is no need to load it separately. `Textcomp` adds the following glyphs. (The mathematical symbols in the otherwise vacant slots in positions 192 and up were mostly borrowed from the STIX math fonts, which use the same SIL OFL as this package. The names below were in those cases are the same as the STIX names, prefixed by "text".)

AlgolRevived-tlf-ts1.tfm:

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	0	1	2	3	4	5	6	7	"0x
'01x	8	9	10	„ <sub>11</sub>	€ <sub>12</sub>	13	* <sub>14</sub>	ı <sub>15</sub>	
'02x	ı̇ <sub>16</sub>	— <sub>17</sub>	„ <sub>18</sub>	19	20	21	22	23	"1x
'03x	← <sub>24</sub>	→ <sub>25</sub>	26	27	28	29	30	31	
'04x	_ <sub>32</sub>	33	34	35	\$ <sub>36</sub>	37	38	' <sub>39</sub>	"2x
'05x	40	41	42	43	ı <sub>44</sub>	45	• <sub>46</sub>	/ <sub>47</sub>	
'06x	48	49	50	51	52	53	54	55	"3x
'07x	56	57	58	59	60	— <sub>61</sub>	62	63	
'10x	64	65	66	67	68	69	70	71	"4x
'11x	72	73	74	75	76	Ü <sub>77</sub>	78	○ <sub>79</sub>	
'12x	80	81	82	83	84	85	86	Ω <sub>87</sub>	"5x
'13x	88	89	90	91	92	93	↑ <sub>94</sub>	↓ <sub>95</sub>	
'14x	` <sub>96</sub>	97	98	99	100	101	102	103	"6x
'15x	104	105	106	107	108	109	110	111	
'20x	128	129	130	131	† <sub>132</sub>	‡ <sub>133</sub>	134	135	"8x
'21x	• <sub>136</sub>	137	138	139	140	141	142	143	
'22x	144	145	146	147	148	149	150	™ <sub>151</sub>	"9x
'23x	152	153	154	155	156	157	158	159	
'24x	160	161	¢ <sub>162</sub>	£ <sub>163</sub>	¤ <sub>164</sub>	¥ <sub>165</sub>	! <sub>166</sub>	§ <sub>167</sub>	"Ax
'25x	168	© <sub>169</sub>	<sup>a</sup> <sub>170</sub>	171	¬ <sub>172</sub>	173	® <sub>174</sub>	175	
'26x	° <sub>176</sub>	± <sub>177</sub>	<sup>2</sup> <sub>178</sub>	<sup>3</sup> <sub>179</sub>	180	μ <sub>181</sub>	¶ <sub>182</sub>	• <sub>183</sub>	"Bx
'27x	184	<sup>1</sup> <sub>185</sub>	° <sub>186</sub>	187	188	189	190	€ <sub>191</sub>	
'30x	' <sub>192</sub>	" <sub>193</sub>	194	195	↔ <sub>196</sub>	↕ <sub>197</sub>	⇐ <sub>198</sub>	↑ <sub>199</sub>	"Cx
'31x	⇒ <sub>200</sub>	↓ <sub>201</sub>	⇔ <sub>202</sub>	↕ <sub>203</sub>	∇ <sub>204</sub>	∮ <sub>205</sub>	∂ <sub>206</sub>	∃ <sub>207</sub>	
'32x	∄ <sub>208</sub>	∅ <sub>209</sub>	Δ <sub>210</sub>	∇ <sub>211</sub>	∈ <sub>212</sub>	∉ <sub>213</sub>	× <sub>214</sub>	€ <sub>215</sub>	"Dx
'33x	∋ <sub>216</sub>	∉ <sub>217</sub>	∋ <sub>218</sub>	219	• <sub>220</sub>	∧ <sub>221</sub>	∨ <sub>222</sub>	223	

'34x	$\cap$ <sup>224</sup>	$\cup$ <sup>225</sup>	$:=$ <sup>226</sup>	$=:$ <sup>227</sup>	$\neq$ <sup>228</sup>	$\equiv$ <sup>229</sup>	$\neq$ <sup>230</sup>	$\leq$ <sup>231</sup>	"Ex
'35x	$\geq$ <sup>232</sup>	$\subset$ <sup>233</sup>	$\supset$ <sup>234</sup>	$\not\subset$ <sup>235</sup>	$\not\supset$ <sup>236</sup>	$\subseteq$ <sup>237</sup>	$\supseteq$ <sup>238</sup>	$\not\subseteq$ <sup>239</sup>	
'36x	$\not\geq$ <sup>240</sup>	$\sqsubset$ <sup>241</sup>	$\sqsupset$ <sup>242</sup>	$\sqsubseteq$ <sup>243</sup>	$\sqsupseteq$ <sup>244</sup>	$\sqcap$ <sup>245</sup>	$\sqdiv$ <sup>246</sup>	$\sqcup$ <sup>247</sup>	"Fx
'37x	<sup>248</sup>	<sup>249</sup>	<sup>250</sup>	<sup>251</sup>	<sup>252</sup>	<sup>253</sup>	<sup>254</sup>	<sup>255</sup>	
	"8	"9	"A	"B	"C	"D	"E	"F	

**List of LaTeX macros to access the TS1 symbols in text mode:**

11 `\capitalcedilla`  
12 `\capitalogonek`  
24 `\textleftarrow`  
25 `\textrightarrow`  
36 `\textdollar`  
39 `\textquotesingle`  
42 `\textasteriskcentered`  
47 `\textfractionsolidus`  
61 `\textminus`  
77 `\textmho`  
79 `\textbigcircle`  
87 `\textohm`  
91 `\textlbrackdbl`  
93 `\textrbrackdbl`  
94 `\textuparrow`  
95 `\textdownarrow`  
96 `\textasciigrave`  
132 `\textdagger`  
133 `\textdaggerdbl`  
134 `\textbardbl`  
136 `\textbullet`  
151 `\texttrademark`  
162 `\textcent`  
163 `\textsterling`  
164 `\textcurrency`  
165 `\textyen`  
166 `\textbrokenbar`  
167 `\textsection`  
169 `\textcopyright`  
170 `\textordfeminine`  
172 `\textlnot`  
174 `\textregistered`  
176 `\textdegree`  
177 `\textpm`  
178 `\texttwosuperior`  
179 `\textthreesuperior`  
181 `\textmu`  
182 `\textparagraph`  
183 `\textperiodcentered`  
184 `\textreferencemark`  
185 `\textonesuperior`  
186 `\textordmasculine`  
191 `\texteuro`  
192 `\textprime`  
193 `\textdprime`  
196 `\textleftrightharrow`

197  $\text{\textupdownarrow}$   
198  $\text{\textLeftarrow}$   
199  $\text{\textUparrow}$   
200  $\text{\textrightarrow}$   
201  $\text{\textDownarrow}$   
202  $\text{\textLeftrightarrow}$   
203  $\text{\textUpdownarrow}$   
204  $\text{\textforall}$   
205  $\text{\textcomplement}$   
206  $\text{\textpartial}$   
207  $\text{\textexists}$   
208  $\text{\textnexists}$   
209  $\text{\textvarepsilon}$   
210  $\text{\textincrement}$   
211  $\text{\textnabla}$   
212  $\text{\textin}$   
213  $\text{\textnotin}$   
214  $\text{\texttimes}$   
215  $\text{\textsmallin}$   
216  $\text{\textni}$   
217  $\text{\textnni}$   
218  $\text{\textsmallni}$   
219  $\text{\textsmallsetminus}$   
220  $\text{\textlargebullet}$   
221  $\text{\textland}$   
222  $\text{\textlor}$   
224  $\text{\textcap}$   
225  $\text{\textcup}$   
226  $\text{\textcoloneq}$   
227  $\text{\textteq}$   
228  $\text{\textneq}$   
229  $\text{\textequiv}$   
230  $\text{\textnequiv}$   
231  $\text{\textleq}$   
232  $\text{\textgeq}$   
233  $\text{\textsubset}$   
234  $\text{\textsupset}$   
235  $\text{\textnssubset}$   
236  $\text{\textnssupset}$   
237  $\text{\textsubseteq}$   
238  $\text{\textsupseteq}$   
239  $\text{\textnsubseteq}$   
240  $\text{\textnssupseteq}$   
241  $\text{\textsqsubset}$   
242  $\text{\textsqsupset}$   
243  $\text{\textsqsupseteq}$   
244  $\text{\textsqsubseteq}$   
245  $\text{\textsqcap}$

246 `\textdiv`  
247 `\textscup`

For example, typing in `A\textcoloneq B` results in  $A:=B$ .