H P 4 9 F O N T S
a collection of Truetype typefaces

You're preparing an instruction manual for an application that is to be used in the new Hewlett Packard 49G calculator, and need to illustrate it. As an example, you have a function that will add angles in Degrees, Minutes and Second format assigned to the shifted "PLUS" key. You can show the keystrokes to be used in an illustration as:

To add in Degrees, Minutes and Seconds, input the first number and stroke "enter", then input the second number and stroke the left-shifted "plus" key.

or:

To add 25°15'30" and 13°40'20", use the following keystrokes:
25.153 [ENTER] 13.402 *left-shift* **[+]**

or:

To add 25°15'30" and 13°40'20", use the following keystrokes:
25.153 ENTER 13.402 ⬅ +

Or, using these fonts, it can look like:
To add 25°15'30" and 13°40'20", use the following keystrokes:

2 5 · 1 5 3 ENTER
1 3 · 4 0 2 ⬅ +

The Keystrokes Font

This font will type any of the keys, shifted keys, scrolling, etc., but it's important to know where the keys are. The basics of the font layout are:

1 The numeric keys (keyboard and touchpad) produce the numbers and/or math symbols while using this font.   1 2 3 4 5 6 7 8 9 ÷ × − + 0 ·

2 The *upper*-case alphabet keys produce the application keystrokes that appear in conjunction with the keys from **A** through **Z**.   F1 F2 F3 F4 F5 F6 APPS MODE TOOL VAR STO▶ NXT HIST CAT EQW SYMB Y^x √X SIN COS TAN EEX ⁺ʟ X ¹/x ÷

3 The *lower*-case alphabet keys produce the alpha keystrokes that appear in conjunction with the keys from **a** through **z**. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Those keys most likely to be used the most have been assigned to some of the more

easily remembered locations (some appear in more than one location).

Starting with the number row keys (the top row), we have:

ENTER	ALPHA	←	→	SPC	ON	≪ ≫	*not used*	{}	×	*not used*	*not used*	—	+	CONT
~	Shift ~	Shift !₁	Shift @₂	Shift #₃	Shift $₄	Shift %₅	Shift ^₆	Shift &₇	Shift *₈	Shift (₉	Shift)₀	−.	Shift +₌	+₌

As you can see, the shifted keys that are math keys still type the math keys while using this font. There are two ways to type in the remaining keystrokes; one way is to use the **Insert Symbol** function in windows, the other is to hold down the Alt key while typing in the four-digit number that corresponds to the wanted symbol. For use with the latter, we have provided character maps for each of the fonts. As an example, the miscellaneous cursor notations are:

⬅	⏏	◀⫿⫿	⯆	⫿⫿▶	⯅	◂⎸	⯯	⎹▶	⬘	⬙	▷	◁
Alt + 0131	Alt + 0136	Alt + 0137	Alt + 0138	Alt + 0139	Alt + 0145	Alt + 0146	Alt + 0147	Alt + 0148	Alt + 0151	Alt + 0152	Alt + 0153	Alt + 0154

We've broken with tradition on the shifted functions. You can see this in the first table above, on the CONT character. It has usually been the practice to enclose the shifted values in boxes, either square or rounded . . . we've had people call for software support who say they can't find the indicated key (because it looks like a key). Our approach this time is to show part of a key, then the function as it appears on the calculator itself. The portion of the key that shows also indicates which shift key to use. A key like *CONT* is a left-shifted key, a key like *ARG* a right-shifted. Of course, you may still show the keystrokes as ← *CONT* or → *ARG* .

The Menu Fonts

You can also generate menu bars for either standard ▦▦▦ ▦▦▦ ▦▦ ▦▦▦ ▦▦▦ ▦▦▦ or custom ▦STOP▦ ▦GO▦ ▦STAY▦ ▦STOP▦ ▦GO▦ ▦STAY▦ menu icons, to include in your manuals. In fact, there's a program (included with the fonts) that will let you generate any icon or symbol that you can make a text string out of (that means *any*, since you have the advantage of total access to all of the characters used in the HP49 through the *CHARS* key) into your document.

In regard to menus, there are some advantages to the minifont used in the HP49 menus, in that all of the characters have the same width, you can now use upper– or lower-case lettering (see preceding paragraph). There are also disadvantages to the system. If you want a menu key that says "#?", it will look like ▦▦▦ instead of ▦▦▦. In our **menu** font, we have used the full-width symbol instead of the 4 pixel-wide version, so you can type the actual symbol into your document as shown in the second example, instead of a representation. You may still build the first one shown, using the **SUP** font and the program, which tells you what to type (as we did in this example).

FONTmenu.ttf types standard menus directly into your manuals or illustrations. For

standard menus, it is easy to use, and with a little practice you'll remember where the key-strokes are.

Using standard alpha-numeric characters is as easy as typing them in. Use the **_uppercase_** letters and the standard numbers.

[font symbol characters]

Use the _lowercase_ letters:

[font symbol characters]

You'll notice that each character has an open side on the left, and a solid bar on the right. You already know that there are additional solid vertical bars needed at the beginning and end of an icon, for it to look right, as in

[icon] , which, taken apart, is [icon] , or [icon] , which is [icon]

The _shifted_ number keys, from 1 through 5 carry the vertical (blank) bar groups.

					shifted symbol			not used	
!	!	!	!	!					-----
Shift ! 1	Shift @ 2	Shift # 3	Shift $ 4	Shift % 5	Shift ^ 6	Shift & 7	Shift * 8	Shift (9	Shift) 0

The _shifted_ 0 (zero) key types in the extra 'tab' bars to make the item a directory icon (if you use it to make a directory icon, type it in first). The _shifted_ 6, 7, & 8 keys give the actual symbol shown for the shifted value (▦, ▦, & ▦) and the _shifted_ 9 is an unused keystroke.

[Windows 'Symbol' dialog box screenshot]

If you use the windows 'Insert Symbol' function to insert characters, you get a map like the one above. Separated from the standard characters (all four pixels wide), are the symbols most used in menus. Some of these are four pixels wide, but most require 5 or 6 pixel widths to make them really readable in a menu. A typical word with 4 letters in a menu icon would start with a 3-pixel vertical bar, and end with a 2-pixel bar, a 3-letter word starts with a 5-pixel bar and ends with a 4. Using some of the symbols just means using different bars at the beginning and end of the menu bar.

The FontSUP typeface

I've been told that I'm a little weird, just to have thought of this one, but a "complete" set of typefaces should be **complete**. This is the one that lets you build *any* kind of menu bar that you can think of. I think the comment was that most people wouldn't.

One of the nice things about the way the fonts in the HP49G can be edited is that it lets you build special characters for your display, that are specific to the application you are writing. In surveying and engineering, for instance, we have the advantage of being able to use the symbol, ₵, instead of writing out the word, centerline. I should also mention that, even though you can build this character, it won't work the same in a menu. You *can* build the menu key as a 21x8 grob, which is how we built oddball menu keys in the HP48. In the HP48, we used the Label Builder, by Jim Donnelly, and I am happy to report that he has written a version for the HP49G (you can download a copy from his website).

Next, using special characters in your menus, you have to illustrate the manual, so there's FontSUP as a tool. The Insert Symbol character map looks like this:
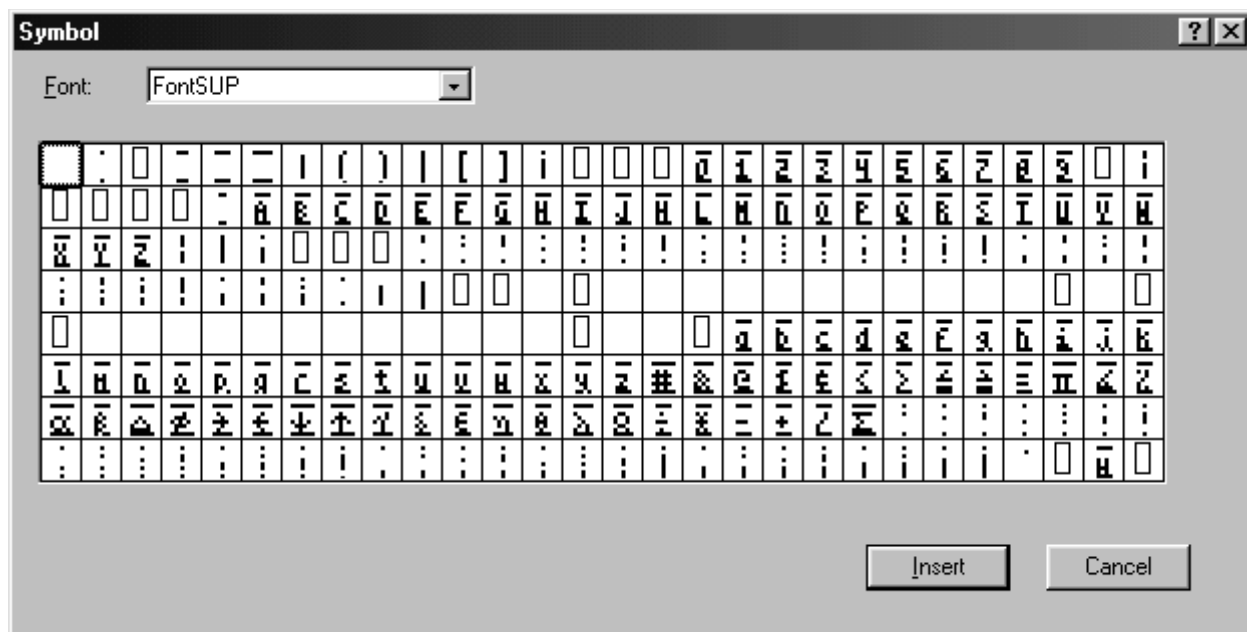
At first glance, you can see the parts to make 'open box' menu keys, upper– and lower-case and symbols, with rounded or square corners. The rest of the font is characters that represent the one pixel wide bars that let you assemble a menu icon, bar by bar, into any possible configuration. The ones in the upper half of the map are for **regular** menu keys, the lower ones do the same for the **open** menu icons. We'll continue our look at the open icons first:

The numeric keys type the numbers; 0123456789, upper-case alpha keys the upper-case alpha; ABCDEFGHIJKLMNOPQRSTUVWXYZ, Lower-case alpha and symbol keystrokes can be selected in the Insert Symbol map, or by using the Alt+ char# method. The number to use in shown in the chart at the back. The menu characters are used with left and right end sym-

bols (box or rounded) to finish the frame of the icon. The assignments for those are shown here:

. .	.. ..	... ...	....	....	*not used*	¦ ¦	[̣ [̣	]̇]	¦ ¦	[	]̇]
Shift !₁	Shift @₂	Shift #₃	Shift $₄	Shift %₅	Shift ^₆	Shift &₇	Shift *₈	Shift (₉	Shift)₀	"'	Shift +₌

As in the menu font, the shifted 1 through 5 keys produce 'filler' bars of the same width as the value of the key. Shifted 7 is a rounded end, shifted 0 a box end (use when the icon doesn't have room for more than 1 vertical bar). The remainder are obviously the end pieces.

Okay, the weird ones. Using the <u>I</u>nsert <u>S</u>ymbol map for these will strain your eyes, as will finding the right ones in the character map included at the end of this paper. So . . .

| 0033 | 0221 | 0222 | 0223 | 0224 | 0225 | 0226 | 0227 | 0228 | 0229 | 0230 | 0231 | 0232 | 0233 | 0234 | 0235 | 0236 | 0237 | 0238 | 0239 | 0240 | 0241 | 0242 | 0243 | 0244 | 0245 | 0246 | 0247 | 0248 | 0249 | 0250 | 0251 | | 0252 |

(pixel-bitmap chart of vertical bar shapes)

| 0033 | 0221 | 0222 | 0223 | 0224 | 0225 | 0226 | 0227 | 0228 | 0229 | 0230 | 0231 | 0232 | 0233 | 0234 | 0235 | 0236 | 0237 | 0238 | 0239 | 0240 | 0241 | 0242 | 0243 | 0244 | 0245 | 0246 | 0247 | 0248 | 0249 | 0250 | 0251 | | 0252 |

Typing <u>Alt</u>+ the character number in the chart above will build one vertical bar of the icon. Note that, because it works differently from the others, 0252 is separate in the chart. When you need a pixel in that row of your vertical bar, put 0252 in first, then use the character number for the rest of the bar to get your bar.

An example portion of an icon (that includes using 0252) is made by holding the <u>Alt</u> key each time and keying in the numbers 0222 0225 0252 0243 0241 0241 0236 (⅀). Once again, on the 49, you would have to build this icon with Label Builder, for it to work.

A comment on this portion of the typeface: the lower-case "w" (char# 0183) does not always respond to *either* type of input, so it has been duplicated as char# 0254, and shows up in the lower right corner of the <u>I</u>nsert <u>S</u>ymbol map (previous page).

For normal menu icons with odd-ball characters, the following characters may be typed in from the keyboard, instead of having to use the character number or Insert Symbol map:

{ a b c d e f g h i j k l m n o p q r s t u v w x y z [ ] ; , \

{ a b c d e f g h i j k l m n o p q r s t u v w x y z [ ] ; , \
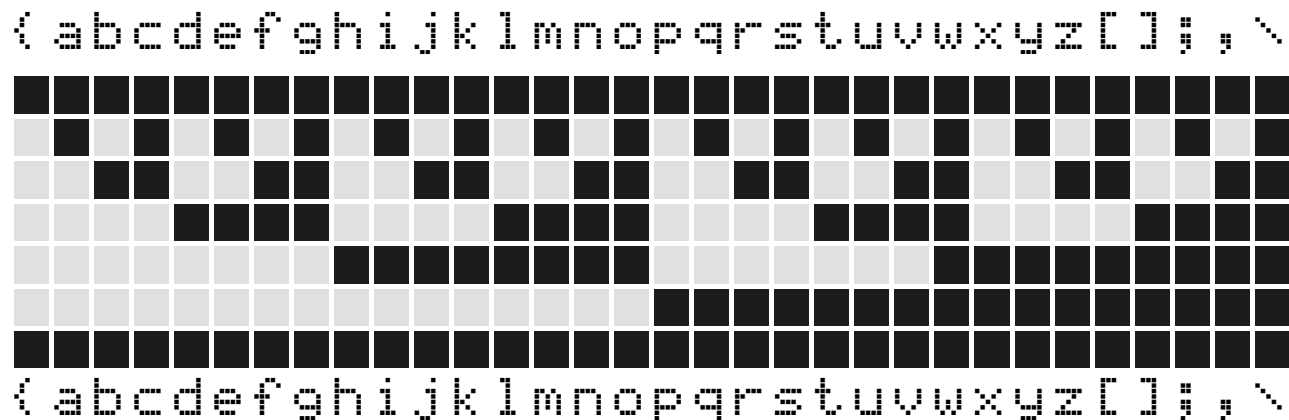
The 'white space' has been shaded in lightly to provide a little more readability. The accessory program "MENU" can also do the conversions for you, telling you exactly which keys to type for your illustration version. Remember to switch from the MENU font to the SUP font for the inserted bars.

The Other fonts

Type these in as you normally would in any other typed work. The characters are placed in the same locations as on the _CHARS_ map which displays the current font in the HP49G, with the following **exceptions**: Character numbers 128 (⊿), 142 (⊹), 158 (▦) and 159 (⌘) will NOT print in a truetype® symbol typeface. Truetype fonts are *not* based on ASCII standards, and will not allow as many characters to the typeface. In this case we have formatted these fonts as symbols, rather than ANSI (ANSI has a total of 11 characters which will not print in a truetype font).

Because these symbols are used too often to just be left out, we reassigned them to other, less used, character numbers. These are outlined below:

for	HP49G CHAR#	**FONT 8** use	**FONT 7** use	**FONT6** use	**MINIFONT** use
⊿	0128	0200	0201	0200	0200
⊹	0142	0201	0205	0201	0201
▦	0158	0202	0246	0202	0202
⌘	0159	0203	0235	0203	0203

FONT7, in the HP49G, has the (minor) advantage that characters number 200 and 201, 204 and 205, 235 and 234 & 244 and 246 are duplicate characters. Therefore all characters are available in this font, if you use the duplicate as needed.

character maps follow, on pages 7 through 13, ENJOY . . .

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	0060	0061	0062	0063
	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
	←		SPC	ON	«»	{}				×	+		—	•	÷	0	1	2	3	4	5	6	7	8	9				CONT		

0064	0065	0066	0067	0068	0069	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	0090	0091	0092	0093	0094	0095
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
→	F1	F2	F3	F4	F5	F6	APPS	MODE	TOOL	VAR	STO▶	NXT	HIST	CAT	EQW	SYMB	y^x	$\sqrt{x}$	SIN	COS	TAN	EEX	$+_L$	X	$1/x$	÷		$+/-$	F#		

0096	0097	0098	0099	0100	0101	0102	0103	0104	0105	0106	0107	0108	0109	0110	0111	0112	0113	0114	0115	0116t	0117	0118	0119	0120	0121	0122	0123	0124	0125	0126	0127
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	
F	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z				ALPHA	

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159
F		→	◀	←	→	SPC	ON	♠	◀I	▼	II▶			Ž			▲	I◀	▼	▶I			▲	▼	▶	◀	•		♠	ž	

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191
F	FILES	BEGIN	CUSTOM	END	i			UPDIR	COPY	RCL		CUT	PREV	PASTE	CANCEL	CMD	UNDO	PRG	CHARS	MTRW	'	MTH	EVAL	DEL	CLEAR	e^x		LN	x^2	$\sqrt[x]{y}$	ASIN	Σ	ACOS	∂

0192	0193	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213	0214	0215	0216	0217	0218	0219	0220	0221	0222	0223
ATAN	∫	10^x	LOG	≠		=	≤		<	≥		>	ABS		ARG	USER	ENTRY	S.SLV	NUM.SLV	EXP&LN	TRIG	FINANC	TIME	[]		""	CALC	ALG	MATRICE	STAT	CONVER	UNITS	( )		—	ARITH	CMPLX

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255
F	LIB	#	BASE	{}	«»	CONT	OFF	∞	→	::	←	π		,	ANS	→NUM		Y=	WIN	GRAPH	2D/3D	TBLSET	TABLE						x			

HP49Keys.ttf **Truetype Typeface**

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033 !	0034 "	0035 #	0036 $	0037 %	0038 &	0039 '	0040 (	0041)	0042 *	0043 +	0044 ,	0045 -	0046 .	0047 /	0048 0	0049 1	0050 2	0051 3	0052 4	0053 5	0054 6	0055 7	0056 8	0057 9	0058 :	0059 ;	0060 <	0061 =	0062 >	0063 ?
	!	'	#	$	%	&	'	(	)	*	+	,	—	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?

0064 @	0065 A	0066 B	0067 C	0068 D	0069 E	0070 F	0071 G	0072 H	0073 I	0074 J	0075 K	0076 L	0077 M	0078 N	0079 O	0080 P	0081 Q	0082 R	0083 S	0084 T	0085 U	0086 V	0087 W	0088 X	0089 Y	0090 Z	0091 [	0092 \	0093]	0094 ^	0095 _
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_

0096 `	0097 a	0098 b	0099 c	0100 d	0101 e	0102 f	0103 g	0104 h	0105 i	0106 j	0107 k	0108 l	0109 m	0110 n	0111 o	0112 p	0113 q	0114 r	0115 s	0116t	0117 u	0118 v	0119 w	0120 x	0121 y	0122 z	0123 {	0124		0125 }	0126 ~	0127
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{			}	~	⊠

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159
☐	x̄	▽	√	∫	Σ	⊕	π	∂	≤	≥	≠	α	÷	☐	↓	↑	√	∮	∈	∩	θ	λ	ρ	σ	τ	ω	Δ	Π	Ω	☐	☐

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191
€	¡	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	—	®	¯	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿

0192 À	0193 Á	0194 Â	0195 Ã	0196 Ä	0197 Å	0198 Æ	0199 Ç	0200 È	0201 É	0202 Ê	0203 Ë	0204 Ì	0205 Í	0206 Î	0207 Ï	0208 Ð	0209 Ñ	0210 Ò	0211 Ó	0212 Ô	0213 Õ	0214 Ö	0215 ×	0216 Ø	0217 Ù	0218 Ú	0219 Û	0220 Ü	0221 Ý	0222 Þ	0223 ß
Ä	Ä	Ä	Ä	Ä	Å	Æ	Ç	∠	←	▪	⊗	Ì	Í	Î	Ï	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255
à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

Font6.ttf Truetype Typeface based on character fonts in the HP49 calculator

Some characters will not normally print out. These have been assigned as follows: for 128 use 200, for 142 use 201, for 158 use 202, and for 159 use 203. The characters that were in these slots are still available in **FontMISC.ttf**

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033 !	0034 "	0035 #	0036 $	0037 %	0038 &	0039 '	0040 (	0041)	0042 *	0043 +	0044 ,	0045 -	0046 .	0047 /	0048 0	0049 1	0050 2	0051 3	0052 4	0053 5	0054 6	0055 7	0056 8	0057 9	0058 :	0059 ;	0060 <	0061 =	0062 >	0063 ?
	!	'	#	$	%	&	'	(	)	*	+	,	—	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?

0064 @	0065 A	0066 B	0067 C	0068 D	0069 E	0070 F	0071 G	0072 H	0073 I	0074 J	0075 K	0076 L	0077 M	0078 N	0079 O	0080 P	0081 Q	0082 R	0083 S	0084 T	0085 U	0086 V	0087 W	0088 X	0089 Y	0090 Z	0091 [	0092 \	0093]	0094 ^	0095 _
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_

0096 `	0097 a	0098 b	0099 c	0100 d	0101 e	0102 f	0103 g	0104 h	0105 i	0106 j	0107 k	0108 l	0109 m	0110 n	0111 o	0112 p	0113 q	0114 r	0115 s	0116t	0117 u	0118 v	0119 w	0120 x	0121 y	0122 z	0123 {	0124		0125 }	0126 ~	0127
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{			}	~	▓

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159
☐	x̄	▽	√	∫	Σ	▶	π	∂	≤	≥	≠	∝	÷	☐	↓	↑	√	δ	ε	η	θ	λ	ρ	σ	τ	ω	∆	Π	Ω	☐	☐

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191
€	¡	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	—	®	¯	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿

0192 Â	0193 Á	0194 Â	0195 Ã	0196 Ä	0197 Å	0198 Ç	0199 É	0200 ∠	0201 É	0202 E	0203 Ì	0204 ←	0205 Î	0206 I	0207 Đ	0208 Ñ	0209 Ò	0210 Ó	0211 Ô	0212 Õ	0213 Ö	0214 ×	0215 Ø	0216 Ù	0217 Ú	0218 Û	0219 Ü	0220 Ⱳ	0221 Ⱳ	0222 Þ	0223 Þ

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255
à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï	đ	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

Font7.ttf Truetype Typeface based on character fonts in the HP49 calculator

Some characters will not normally print out. These have been assigned as follows: for 128 use 201, for 142 use 205, for 158 use 246, and for 159 use 20235. The replaced characters were also duplicates in the 49 font, and are the same as 201=200, 205=204, 235=234 and 246=244

Font8.ttf Truetype Typeface based on character fonts in the HP49 calculator

Some characters will not normally print out. These have been assigned as follows: for 128 use 200, for 142 use 201, for 158 use 202, and for 159 use 203. The characters that were in these slots are still available in **FontMISC.ttf**

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033 !	0034 "	0035 #	0036 $	0037 %	0038 &	0039 '	0040 (	0041)	0042 *	0043 +	0044 ,	0045 -	0046 .	0047 /	0048 0	0049 1	0050 2	0051 3	0052 4	0053 5	0054 6	0055 7	0056 8	0057 9	0058 :	0059 ;	0060 <	0061 =	0062 >	0063 ?
	!	'	#	$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?

0064 @	0065 A	0066 B	0067 C	0068 D	0069 E	0070 F	0071 G	0072 H	0073 I	0074 J	0075 K	0076 L	0077 M	0078 N	0079 O	0080 P	0081 Q	0082 R	0083 S	0084 T	0085 U	0086 V	0087 W	0088 X	0089 Y	0090 Z	0091 [	0092 \	0093]	0094 ^	0095 _
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_

0096 `	0097 a	0098 b	0099 c	0100 d	0101 e	0102 f	0103 g	0104 h	0105 i	0106 j	0107 k	0108 l	0109 m	0110 n	0111 o	0112 p	0113 q	0114 r	0115 s	0116t	0117 u	0118 v	0119 w	0120 x	0121 y	0122 z	0123 {	0124		0125 }	0126 ~	0127
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{			}	~	

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191

0192	0193	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213	0214	0215	0216	0217	0218	0219	0220	0221	0222	0223

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255

FontMini.ttf

Truetype Typeface based on character fonts in the HP49 calculator

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0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	0060	0061	0062	0063
	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?

0064	0065	0066	0067	0068	0069	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	0090	0091	0092	0093	0094	0095
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_

0096	0097	0098	0099	0100	0101	0102	0103	0104	0105	0106	0107	0108	0109	0110	0111	0112	0113	0114	0115	0116t	0117	0118	0119	0120	0121	0122	0123	0124	0125	0126	0127
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s		u	v	w	x	y	z	{			}	~	

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191

0192	0193	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213	0214	0215	0216	0217	0218	0219	0220	0221	0222	0223

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255

FONTmenu.ttf **Truetype Typeface based on character fonts in the HP49 calculator**

This font allows the user to type any symbols into a menu, using the HP48 program to output the characters to type for any given line of a menu.
It also includes the keys for typing a menu of the 'boxed' type, with either square or rounded corners, and the missing characters from Font 6 and

0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031

0032	0033 !	0034 "	0035 #	0036 $	0037 %	0038 &	0039 '	0040 (	0041)	0042 *	0043 +	0044 ,	0045 -	0046 .	0047 /	0048 0	0049 1	0050 2	0051 3	0052 4	0053 5	0054 6	0055 7	0056 8	0057 9	0058 :	0059 ;	0060 <	0061 =	0062 >	0063 ?

0064 @	0065 A	0066 B	0067 C	0068 D	0069 E	0070 F	0071 G	0072 H	0073 I	0074 J	0075 K	0076 L	0077 M	0078 N	0079 O	0080 P	0081 Q	0082 R	0083 S	0084 T	0085 U	0086 V	0087 W	0088 X	0089 Y	0090 Z	0091 [	0092 \	0093]	0094 ^	0095 _

0096 `	0097 a	0098 b	0099 c	0100 d	0101 e	0102 f	0103 g	0104 h	0105 i	0106 j	0107 k	0108 l	0109 m	0110 n	0111 o	0112 p	0113 q	0114 r	0115 s	0116 t	0117 u	0118 v	0119 w	0120 x	0121 y	0122 z	0123 {	0124		0125 }	0126 ~	0127

0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159

0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191

0192	0193	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213	0214	0215	0216	0217	0218	0219	0220	0221	0222	0223

0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255

FontSUP.ttf **Truetype Typeface based on character fonts in the HP49 calculator**

This font allows the user to type any symbols into a menu, using the HP48 program to output the characters to type for any given line of a menu. It also includes the keys for typing a menu of the 'boxed' type, with either square or rounded corners, and the missing characters from Font 6 and

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