

Table 2-16 Display Controls Font (Right Half)

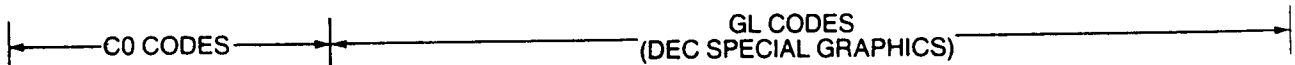
8		9		10		11		12		13		14		15		COLUMN	ROW
1 0 0 0		1 0 0 1		1 0 1 0		1 0 1 1		1 1 0 0		1 1 0 1		1 1 1 0		1 1 1 1		b8 b7 BITS b6 b5 b4 b3 b2 b1	
8 ₀	200 128 80	9 ₀	220 144 90	A ₀	240 160 A0	o	260 176 B0	À	300 192 C0	Ð	320 208 D0	à	340 224 E0	ƒ	360 240 F0	0 0 0 0	0
8 ₁	201 129 81	9 ₁	221 145 91	i	241 161 A1	±	261 177 B1	Á	301 193 C1	Ñ	321 209 D1	á	341 225 E1	ñ	361 241 F1	0 0 0 1	1
8 ₂	202 130 82	9 ₂	222 146 92	€	242 162 A2	2	262 178 B2	Â	302 194 C2	Ò	322 210 D2	â	342 226 E2	ò	362 242 F2	0 0 1 0	2
8 ₃	203 131 83	9 ₃	223 147 93	£	243 163 A3	3	263 179 B3	Ã	303 195 C3	Ó	323 211 D3	ã	343 227 E3	ó	363 243 F3	0 0 1 1	3
8 ₄	204 132 84	9 ₄	224 148 94	A ₄	244 164 A4	B ₄	264 180 B4	Ä	304 196 C4	Ô	324 212 D4	ä	344 228 E4	ô	364 244 F4	0 1 0 0	4
8 ₅	205 133 85	9 ₅	225 149 95	Ÿ	245 165 A5	μ	265 181 B5	Å	305 197 C5	Õ	325 213 D5	å	345 229 E5	õ	365 245 F5	0 1 0 1	5
8 ₆	206 134 86	9 ₆	226 150 96	A ₆	246 166 A6	¶	266 182 B6	Æ	306 198 C6	Ö	326 214 D6	æ	346 230 E6	ö	366 246 F6	0 1 1 0	6
8 ₇	207 135 87	9 ₇	227 151 97	§	247 167 A7	·	267 183 B7	Ç	307 199 C7	Œ	327 215 D7	ç	347 231 E7	œ	367 247 F7	0 1 1 1	7
8 ₈	210 136 88	9 ₈	230 152 98	ƒ	250 168 A8	B ₈	270 184 B8	È	310 200 C8	Ø	330 216 D8	è	350 232 E8	ø	370 248 F8	1 0 0 0	8
8 ₉	211 137 89	9 ₉	231 153 99	©	251 169 A9	1	271 185 B9	É	311 201 C9	Ù	331 217 D9	é	351 233 E9	ù	371 249 F9	1 0 0 1	9
8 _A	212 138 8A	9 _A	232 154 9A	a	252 170 AA	o	272 186 BA	Ê	312 202 CA	Ú	332 218 DA	ê	352 234 EA	ú	372 250 FA	1 0 1 0	10
8 _B	213 139 8B	9 _B	233 155 9B	«	253 171 AB	»	273 187 BB	Ë	313 203 CB	Û	333 219 DB	ë	353 235 EB	û	373 251 FB	1 0 1 1	11
8 _C	214 140 8C	9 _C	234 156 9C	A _C	254 172 AC	¼	274 188 BC	Ì	314 204 CC	Ü	334 220 DC	ì	354 236 EC	ü	374 252 FC	1 1 0 0	12
8 _D	215 141 8D	9 _D	235 157 9D	A _D	255 173 AD	½	275 189 BD	Í	315 205 CD	Ý	335 221 DD	í	355 237 ED	ÿ	375 253 FD	1 1 0 1	13
8 _E	216 142 8E	9 _E	236 158 9E	A _E	256 174 AE	B _E	276 190 BE	Î	316 206 CE	Ð	336 222 DE	î	356 238 EE	ƒ	376 254 FE	1 1 1 0	14
8 _F	217 143 8F	9 _F	237 159 9F	A _F	257 175 AF	¿	277 191 BF	Ï	317 207 CF	ß	337 223 DF	ï	357 239 EF	◻	377 255 FF	1 1 1 1	15



VT 220
Exhibit A2

Table 2-4 DEC Special Graphics Character Set

ROW	COLUMN				0		1		2		3		4		5		6		7		
	BITS				0 0 0		0 0 1		0 1 0		0 1 1		1 0 0		1 0 1		1 1 0		1 1 1		
	87	86	85	84 83 82 81																	
0	0	0	0	0	NUL	0 0 0	DLE	20 16 10	SP	40 32 20	0	60 48 30	@	100 64 40	P	120 80 50	⬇	140 96 60	-	160 112 70	
1	0	0	0	1	SOH	1 1 1	DC1 (XON)	21 17 11	!	41 33 21	1	61 49 31	A	101 65 41	Q	121 81 51	⌘	141 97 61	-	161 113 71	
2	0	0	1	0	STX	2 2 2	DC2	22 18 12	"	42 34 22	2	62 50 32	B	102 66 42	R	122 82 52	⌘	142 98 62	-	162 114 72	
3	0	0	1	1	ETX	3 3 3	DC3 (XOFF)	23 19 13	#	43 35 23	3	63 51 33	C	103 67 43	S	123 83 53	⌘	143 99 63	-	163 115 73	
4	0	1	0	0	EOT	4 4 4	DC4	24 20 14	\$	44 36 24	4	64 52 34	D	104 68 44	T	124 84 54	⌘	144 100 64	⌘	164 116 74	
5	0	1	0	1	ENQ	5 5 5	NAK	25 21 15	%	45 37 25	5	65 53 35	E	105 69 45	U	125 85 55	⌘	145 101 65	⌘	165 117 75	
6	0	1	1	0	ACK	6 6 6	SYN	26 22 16	&	46 38 26	6	66 54 36	F	106 70 46	V	126 86 56	o	146 102 66	⌘	166 118 76	
7	0	1	1	1	BEL	7 7 7	ETB	27 23 17	'	47 39 27	7	67 55 37	G	107 71 47	W	127 87 57	±	147 103 67	⌘	167 119 77	
8	1	0	0	0	BS	10 8 8	CAN	30 24 18	(	50 40 28	8	70 56 38	H	110 72 48	X	130 88 58	⌘	150 104 68	|	170 120 78
9	1	0	0	1	HT	11 9 9	EM	31 25 19	)	51 41 29	9	71 57 39	I	111 73 49	Y	131 89 59	⌘	151 105 69	≤	171 121 79
10	1	0	1	0	LF	12 10 A	SUB	32 26 1A	*	52 42 2A	:	72 58 3A	J	112 74 4A	Z	132 90 5A	⌘	152 106 6A	≥	172 122 7A	
11	1	0	1	1	VT	13 11 B	ESC	33 27 1B	+	53 43 2B	;	73 59 3B	K	113 75 4B	[	133 91 5B	⌘	153 107 6B	⌘	173 123 7B
12	1	1	0	0	FF	14 12 C	FS	34 28 1C	,	54 44 2C	<	74 60 3C	L	114 76 4C	\	134 92 5C	⌘	154 108 6C	≠	174 124 7C	
13	1	1	0	1	CR	15 13 D	GS	35 29 1D	-	55 45 2D	=	75 61 3D	M	115 77 4D	]	135 93 5D	⌘	155 109 6D	£	175 125 7D
14	1	1	1	0	SO	16 14 E	RS	36 30 1E	.	56 46 2E	>	76 62 3E	N	116 78 4E	^	136 94 5E	⌘	156 110 6E	·	176 126 7E	
15	1	1	1	1	SI	17 15 F	US	37 31 1F	/	57 47 2F	?	77 63 3F	O	117 79 4F	(BLANK)	137 95 5F	-	157 111 6F	SCAN 1	DEL	177 127 7F



KEY

CHARACTER	ESC	33	OCTAL
		27	DECIMAL
		1B	HEX

VT 220
Exhibit A3

VT character before performing the new line function.

- XOFF (DC3) and XON (DC1) maintain flow control, if enabled in set-up. The terminal displays the DC1 or DC3 character after performing the control function.
- The terminal does not display SSU session management commands (Chapter 14).

8		9		10		11		12		13		14		15		COLUMN				ROW
1 0 0 0		1 0 0 1		1 0 1 0		1 0 1 1		1 1 0 0		1 1 0 1		1 1 1 0		1 1 1 1		b8	b7	b6	b5	
80	200 128 80	DCS	220 144 90	NSP	240 160 A0	°	260 176 80	À	300 192 C0	Ð	320 208 D0	à	340 224 E0	ð	360 240 F0	0	0	0	0	0
81	201 129 81	PU1	221 145 91	ı	241 161 A1	±	261 177 81	Á	301 193 C1	Ñ	321 209 D1	á	341 225 E1	ñ	361 241 F1	0	0	0	0	1
82	202 130 82	PU2	222 146 92	€	242 162 A2	2	262 178 82	Â	302 194 C2	Ò	322 210 D2	â	342 226 E2	ò	362 242 F2	0	0	1	0	2
83	203 131 83	STS	223 147 93	£	243 163 A3	3	263 179 83	Ã	303 195 C3	Ó	323 211 D3	ã	343 227 E3	ó	363 243 F3	0	0	1	1	3
IND	204 132 84	CRH	224 148 94	¤	244 164 A4	'	264 180 84	Ä	304 196 C4	Ô	324 212 D4	ä	344 228 E4	ô	364 244 F4	0	1	0	0	4
NEL	205 133 85	MW	225 149 95	¥	245 165 A5	µ	265 181 85	Å	305 197 C5	Õ	325 213 D5	å	345 229 E5	õ	365 245 F5	0	1	0	1	5
SSA	206 134 86	SPA	226 150 96	ıı	246 166 A6	¶	266 182 86	Æ	306 198 C6	Ö	326 214 D6	æ	346 230 E6	ö	366 246 F6	0	1	1	0	6
ESA	207 135 87	EPA	227 151 97	§	247 167 A7	·	267 183 87	Ç	307 199 C7	×	327 215 D7	ç	347 231 E7	÷	367 247 F7	0	1	1	1	7
HTS	210 136 88	98	230 152 98	¨	250 168 A8	,	270 184 88	È	310 200 C8	Ø	330 216 D8	è	350 232 E8	ø	370 248 F8	1	0	0	0	8
HTJ	211 137 89	99	231 153 99	©	251 169 A9	1	271 185 89	É	311 201 C9	Ù	331 217 D9	é	351 233 E9	ù	371 249 F9	1	0	0	1	9
VTS	212 138 8A	9A	232 154 9A	ª	252 170 AA	º	272 186 8A	Ê	312 202 CA	Ú	332 218 DA	ê	352 234 EA	ú	372 250 FA	1	0	1	0	10
PLD	213 139 8B	CS1	233 155 9B	«	253 171 AB	»	273 187 8B	Ë	313 203 CB	Û	333 219 DB	ë	353 235 EB	û	373 251 FB	1	0	1	1	11
PLU	214 140 8C	ST	234 156 9C	¬	254 172 AC	¼	274 188 8C	Ì	314 204 CC	Ü	334 220 DC	ì	354 236 EC	ü	374 252 FC	1	1	0	0	12
RI	215 141 8D	OSC	235 157 9D	-	255 173 AD	½	275 189 8D	Í	315 205 CD	Ý	335 221 DD	í	355 237 ED	ý	375 253 FD	1	1	0	1	13
SS2	216 142 8E	PM	236 158 9E	®	256 174 AE	¾	276 190 8E	Î	316 206 CE	Þ	336 222 DE	î	356 238 EE	þ	376 254 FE	1	1	1	0	14
SS3	217 143 8F	APC	237 159 9F	-	257 175 AF	¿	277 191 8F	Ï	317 207 CF	ß	337 223 DF	ï	357 239 EF	ÿ	377 255 FF	1	1	1	1	15



MA-0401-86

Exhibit B2
Figure 2-9 Display Controls Font (Right Half)

VT 320

Display Controls Mode

Display Controls Font (Left Half)

Column	0	1	2	3	4	5	6	7
0	NUL	SP	0	@	P	.	.	.
1	SOH	!	1	A	Q	a	.	.
2	STX	"	2	B	R	b	.	.
3	ETX	#	3	C	S	c	.	.
4	EOT	\$	4	D	T	d	.	.
5	ENQ	%	5	E	U	e	.	.
6	ACK	&	6	F	V	f	.	.
7	BEL	'	7	G	W	g	.	.
8	BS	(	8	H	X	h	.	.
9	HT	)	9	I	Y	i	.	.
10	LF	*	10	J	Z	j	.	.
11	VT	+	11	K	[	k	.	.
12	FF	,	12	L	\	l	.	.
13	CR	-	13	M	]	m	.	.
14	SO	.	14	N	^	n	.	.
15	SI	/	15	O	_	o	.	.

Key: C0 Codes, C1 Codes, C2 Codes (ASCII Graphic), C3 Codes (ASCII Graphic)

Key: ESC Octal, ESC Decimal, ESC Hex

esc_0000_00.00

Display Controls Font (Right Half)

Column	8	9	10	11	12	13	14	15
0	0	1	2	3	4	5	6	7
1	8	9	10	11	12	13	14	15
2	16	17	18	19	20	21	22	23
3	24	25	26	27	28	29	30	31
4	32	33	34	35	36	37	38	39
5	40	41	42	43	44	45	46	47
6	48	49	50	51	52	53	54	55
7	56	57	58	59	60	61	62	63
8	64	65	66	67	68	69	70	71
9	72	73	74	75	76	77	78	79
10	80	81	82	83	84	85	86	87
11	88	89	90	91	92	93	94	95
12	96	97	98	99	100	101	102	103
13	104	105	106	107	108	109	110	111
14	112	113	114	115	116	117	118	119
15	120	121	122	123	124	125	126	127

Key: C0 Codes, C1 Codes, C2 Codes (ISO Latin-1 Supplemental Graphic), C3 Codes (ISO Latin-1 Supplemental Graphic)

Key: ESC Octal, ESC Decimal, ESC Hex

esc_0000_00.00

Exhibit C1

VT 400

Exhibit C2

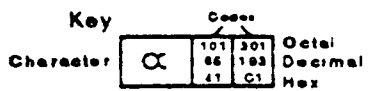
VT420 Program

VT420

DEC Technical

Character Set

b7 b6 b5 b4		b3 b2 b1		0 1		0 1		0 1		0 1		0 1		0 1	
Bits		GL	GR	GL	GR	GL	GR	GL	GR	GL	GR	GL	GR	GL	GR
Column		2	10	3	11	4	12	5	13	6	14	7	15		
Row															
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0



Note
When Set is Mapped into GR
Bit B6 is 1

G&F_0590_89.DG

Characters

Control Characters Recognized

Mnemonic
Column/Row Function

Name	Mnemonic	Column/Row	Function
Horizontal	HT		Mov
tab	0/9		next
			are

Exhibit C3

DEC Technical character set (not on APL option)

000	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015
0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
016	017	018	019	020	021	022	023	024	025	026	027	028	029	030	031
G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047
W	X	Y	Z	[	]	^	_	`	a	b	c	d	e	f	g
048	049	050	051	052	053	054	055	056	057	058	059	060	061	062	063
h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
064	065	066	067	068	069	070	071	072	073	074	075	076	077	078	079
x	y	z	{	}	~	?	!	"	#	\$	%	&	'	()
080	081	082	083	084	085	086	087	088	089	090	091	092	093	094	095
^	~	?	!	"	#	\$	%	&	'	()	*	+	,	-
096	097	098	099	100	101	102	103	104	105	106	107	108	109	110	111
-	.	/	:	;	<	=	>	?	@	A	B	C	D	E	F
112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V

United States ASCII Character Set

N _U	0 000 00	D _L	16 020 10		32 040 20	0	48 080 30	@	64 100 40	P	80 120 50	.	96 140 60	p	112 160 70
S _H	1 001 01	D ₁	17 021 11	!	33 041 21	1	49 061 31	A	65 101 41	Q	81 121 51	a	97 141 61	q	113 161 71
S _X	2 002 02	D ₂	18 022 12	"	34 042 22	2	50 062 32	B	66 102 42	R	82 122 52	b	98 142 62	r	114 162 72
E _X	3 003 03	D ₃	19 023 13	#	35 043 23	3	51 063 33	C	67 103 43	S	83 123 53	c	99 143 63	s	115 163 73
E _T	4 004 04	D ₄	20 024 14	\$	36 044 24	4	52 064 34	D	68 104 44	T	84 124 54	d	100 144 64	t	116 164 74
E _Q	5 005 05	N _K	21 025 15	%	37 045 25	5	53 065 35	E	69 105 45	U	85 125 55	e	101 145 65	u	117 165 75
A _K	6 006 06	S _Y	22 026 16	&	38 046 26	6	54 066 36	F	70 106 46	V	86 126 56	f	102 146 66	v	118 166 76
B _L	7 007 07	E _B	23 027 17	'	39 047 27	7	55 067 37	G	71 107 47	W	87 127 57	g	103 147 67	w	119 167 77
B _S	8 010 08	C _N	24 030 18	(	40 050 28	8	56 070 38	H	72 110 48	X	88 130 58	h	104 150 68	x	120 170 78
H _T	9 011 09	E _M	25 031 19	)	41 051 29	9	57 071 39	I	73 111 49	Y	89 131 59	i	105 151 69	y	121 171 79
L _F	10 012 0A	S _B	26 032 1A	*	42 052 2A	:	58 072 3A	J	74 112 4A	Z	90 132 5A	j	106 152 6A	z	122 172 7A
V _T	11 013 0B	E _C	27 033 1B	+	43 053 2B	;	59 073 3B	K	75 113 4B	[	91 133 5B	k	107 153 6B	{	123 173 7B
F _F	12 014 0C	F _S	28 034 1C	,	44 054 2C	<	60 074 3C	L	76 114 4C	\	92 134 5C	l	108 154 6C	|	124 174 7C
C _R	13 015 0D	G _S	29 035 1D	-	45 055 2D	=	61 075 3D	M	77 115 4D	]	93 135 5D	m	109 155 6D	}	125 175 7D
S _O	14 016 0E	R _S	30 036 1E	.	46 056 2E	>	62 076 3E	N	78 116 4E	^	94 136 5E	n	110 156 6E	~	126 176 7E
S _I	15 017 0F	U _S	31 037 1F	/	47 057 2F	?	63 077 3F	O	79 117 4F	_	95 137 5F	o	111 157 6F	▒	127 177 7F

Displayed Character	E	27	Decimal
	C	1B		Octal Hex

DG
Exhibit D1

Word-Processing, Greek, and Math Character Set

0	000 00		16	020 10		32	040 20	0	48	080 30	!!	64	100 40	π	80	120 50	T	96	140 60	0	112	160 70
1	001 01		17	021 11	┌	33	041 21	1	49	061 31	α	65	101 41	ρ	81	121 51	◆	97	141 61	1	113	161 71
2	002 02		18	022 12	L	34	042 22	2	50	062 32	β	66	102 42	σ	82	122 52	▶	98	142 62	2	114	162 72
3	003 03		19	023 13	└	35	043 23	3	51	063 33	γ	67	103 43	τ	83	123 53	▷	99	143 63	3	115	163 73
4	004 04		20	024 14	┐	36	044 24	4	52	064 34	δ	68	104 44	υ	84	124 54	◀	100	144 64	4	116	164 74
5	005 05		21	025 15	f	37	045 25	5	53	065 35	ϵ	69	105 45	ϕ	85	125 55	▲	101	145 65	5	117	165 75
6	006 06		22	026 16	~	38	046 26	6	54	066 36	ζ	70	106 46	χ	86	126 56	▼	102	146 66	6	118	166 76
7	007 07		23	027 17	∂	39	047 27	7	55	067 37	η	71	107 47	ψ	87	127 57	⊗	103	147 67	7	119	167 77
8	010 08		24	030 18	∇	40	050 28	8	56	070 38	θ	72	110 48	ω	88	130 58	⊘	104	150 68	8	120	170 78
9	011 09		25	031 19	∠	41	051 29	9	57	071 39	ι	73	111 49	Ω	89	131 59	⊗	105	151 69	9	121	171 79
10	012 0A		26	032 1A	ƒ	42	052 2A	≠	58	072 3A	κ	74	112 4A	Δ	90	132 5A	⊗	106	152 6A	H _F	122	172 7A
11	013 0B		27	033 1B	J	43	053 2B	└┐	59	073 3B	λ	75	113 4B	¶	91	133 5B	⊗	107	153 6B	↑	123	173 7B
12	014 0C		28	034 1C	√	44	054 2C	←	60	074 3C	μ	76	114 4C	B _p	92	134 5C	▷	108	154 6C	→	124	174 7C
13	015 0D		29	035 1D	√	45	055 2D	✱	61	075 3D	ν	77	115 4D	B _E	93	135 5D	▷	109	155 6D	←	125	175 7D
14	016 0E		30	036 1E	∞	46	056 2E	→	62	076 3E	ξ	78	116 4E	F _N	94	136 5E	◀	110	156 6E	↓	126	176 7E
15	017 0F		31	037 1F	∞	47	057 2F	.	63	077 3F	o	79	117 4F	F _E	96	137 5F	◀	111	157 6F		127	177 7F

Displayed Character	ξ	Decimal	78
		Octal	116
		Hex	4E

DG
Exhibit D2

DG Line Drawing Character Set

0	000	00	16	020	10	32	040	20	48	060	30	®	64	100	40	80	120	50	96	140	60	112	160	70
1	001	01	17	021	11	33	041	21	49	061	31	©	65	101	41	81	121	51	97	141	61	113	161	71
2	002	02	18	022	12	34	042	22	50	062	32	☐	66	102	42	82	122	52	98	142	62	114	162	72
3	003	03	19	023	13	35	043	23	51	063	33		67	103	43	83	123	53	99	143	63	115	163	73
4	004	04	20	024	14	36	044	24	52	064	34		68	104	44	84	124	54	100	144	64	116	164	74
5	005	05	21	025	15	37	045	25	53	065	35		69	105	45	85	125	55	101	145	65	117	165	75
6	006	06	22	026	16	38	046	26	54	066	36		70	106	46	86	126	56	102	146	66	118	166	76
7	007	07	23	027	17	39	047	27	55	067	37		71	107	47	87	127	57	103	147	67	119	167	77
8	010	08	24	030	18	40	050	28	56	070	38		72	110	48	88	130	58	104	150	68	120	170	78
9	011	09	25	031	19	41	051	29	57	071	39		73	111	49	89	131	59	105	151	69	121	171	79
10	012	0A	26	032	1A	42	052	2A	58	072	3A		74	112	4A	90	132	5A	106	152	6A	122	172	7A
11	013	0B	27	033	1B	43	053	2B	59	073	3B		75	113	4B	91	133	5B	107	153	6B	123	173	7B
12	014	0C	28	034	1C	44	054	2C	60	074	3C	---	76	114	4C	92	134	5C	108	154	6C	124	174	7C
13	015	0D	29	035	1D	45	055	2D	61	075	3D	÷	77	115	4D	93	135	5D	109	155	6D	125	175	7D
14	016	0E	30	036	1E	46	056	2E	62	076	3E	⊙	78	116	4E	94	136	5E	110	156	6E	126	176	7E
15	017	0F	31	037	1F	47	057	2F	63	077	3F	™	79	117	4F	95	137	5F	111	157	6F	127	177	7F

Displayed Character

		41
		051
		29

 Decimal
Octal
Hex

DG
Exhibit D3

DG Special Graphics Character Set (PC Characters)

	0 000 00		16 020 10		32 040 20	○	48 060 30	Ω	64 100 40		80 120 50		96 140 60	≡	112 160 70
	1 001 01		17 021 11	?	33 041 21	●	49 061 31	┌	65 101 41		81 121 51		97 141 61	·	113 161 71
	2 002 02		18 022 12	♀	34 042 22	♂	50 062 32	└	66 102 42		82 122 52		98 142 62	η	114 162 72
	3 003 03		19 023 13	ℵ	35 043 23	⊕	51 063 33		67 103 43		83 123 53		99 143 63	■	115 163 73
	4 004 04		20 024 14	—	36 044 24	♫	52 064 34		68 104 44		84 124 54		100 144 64	ÿ	116 164 74
	5 005 05		21 025 15	—	37 045 25	♫	53 065 35		69 105 45		85 125 55		101 145 65		117 165 75
	6 006 06		22 026 16	—	38 046 26	⚙	54 066 36		70 106 46		86 126 56		102 146 66		118 166 76
	7 007 07		23 027 17	—	39 047 27	↕	55 067 37		71 107 47		87 127 57		103 147 67		119 167 77
	8 008 08		24 030 18	□	40 050 28	■	56 070 38		72 110 48		88 130 58	Γ	104 150 68		120 170 78
	9 009 09		25 031 19	☺	41 051 29	↕	57 071 39		73 111 49		89 131 59	π	105 151 69		121 171 79
	10 012 0A		26 032 1A	⊕	42 052 2A	┌	58 072 3A		74 112 4A		90 132 5A	Σ	106 152 6A		122 172 7A
	11 013 0B		27 033 1B	♥	43 053 2B	↔	59 073 3B		75 113 4B		91 133 5B	Φ	107 153 6B		123 173 7B
	12 014 0C		28 034 1C	♣	44 054 2C	Δ	60 074 3C		76 114 4C		92 134 5C	θ	108 154 6C		124 174 7C
	13 015 0D		29 035 1D	♠	45 055 2D	ÿ	61 075 3D		77 115 4D		93 135 5D	♁	109 155 6D		125 175 7D
	14 016 0E		30 036 1E	•	46 056 2E	P _t	62 076 3E		78 116 4E		94 136 5E	ε	110 156 6E		126 176 7E
	15 017 0F		31 037 1F	•	47 057 2F	a	63 077 3F		79 117 4F		95 137 5F	Π	111 157 6F		127 177 7F

Displayed Character  Decimal Octal Hex

DG
Exhibit D4

VT Multinational Character Set

	128 200 80	D _S	144 220 90		160 240 A0	°	176 260 B0	À	192 300 C0		208 320 D0	à	224 340 E0		240 360 F0
	129 201 81		145 221 91	ı	161 241 A1	±	177 261 B1	Á	193 301 C1	Ñ	209 321 D1	á	225 341 E1	ñ	241 361 F1
	130 202 82		146 222 92	¢	162 242 A2	2	178 262 B2	Â	194 302 C2	Ò	210 322 D2	â	226 342 E2	ò	242 362 F2
	131 203 83		147 223 93	£	163 243 A3	3	179 263 B3	Ã	195 303 C3	Ó	211 323 D3	ã	227 343 E3	ó	243 363 F3
I _D	132 204 84		148 224 94		164 244 A4		180 264 B4	Ä	196 304 C4	Ô	212 324 D4	ä	228 344 E4	ô	244 364 F4
N _E	133 205 85		149 225 95	¥	165 245 A5	μ	181 265 B5	Å	197 305 C5	Õ	213 325 D5	å	229 345 E5	õ	245 365 F5
	134 206 86		150 226 96		166 246 A6	¶	182 266 B6	Æ	198 306 C6	Ö	214 326 D6	æ	230 346 E6	ö	246 366 F6
	135 207 87		151 227 97	§	167 247 A7	·	183 267 B7	Ç	199 307 C7	Ɔ	215 327 D7	ç	231 347 E7	œ	247 367 F7
H _S	136 210 88		152 230 98	ˆ	168 250 A8		184 270 B8	È	200 310 C8	Ø	216 330 D8	è	232 350 E8	ø	248 370 F8
	137 211 89		153 231 99	©	169 251 A9	1	185 271 B9	É	201 311 C9	Ù	217 331 D9	é	233 351 E9	ù	249 371 F9
	138 212 8A		154 232 9A	ª	170 252 AA	²	186 272 BA	Ê	202 312 CA	Ú	218 332 DA	ê	234 352 EA	ú	250 372 FA
	139 213 8B	C _I	155 233 9B	<<	171 253 AB	>>	187 273 BB	Ë	203 313 CB	Û	219 333 DB	ë	235 353 EB	û	251 373 FB
	140 214 8C	S _T	156 234 9C		172 254 AC	¼	188 274 BC	Ì	204 314 CC	Ü	220 334 DC	ì	236 354 EC	ü	252 374 FC
R _I	141 215 8D		157 235 9D		173 255 AD	½	189 275 BD	Í	205 315 CD	ÿ	221 335 DD	í	237 355 ED	ÿ	253 375 FD
S ₂	142 216 8E		158 236 9E		174 256 AE		190 276 BE	Î	206 316 CE		222 336 DE	î	238 356 EE		254 376 FE
S ₃	143 217 8F		159 237 9F		175 257 AF	ı	191 277 BF	Ï	207 317 CF	β	223 337 DF	ï	239 357 EF		255 377 FF

Displayed Character	C _I	155 233 9B
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Decimal
Octal
Hex

DG
Exhibit D5

VT Special Graphics Character Set (VT Line Drawing)

0	000	00	16	020	10	32	040	20	0	48	080	30	@	64	100	40	P	80	120	50	◆	96	140	60		112	160	70
1	001	01	17	021	11	33	041	21	1	49	061	31	A	65	101	41	Q	81	121	51	▒	97	141	61		113	161	71
2	002	02	18	022	12	34	042	22	2	50	062	32	B	66	102	42	R	82	122	52	H _T	98	142	62		114	162	72
3	003	03	19	023	13	35	043	23	3	51	063	33	C	67	103	43	S	83	123	53	F _F	99	143	63		115	163	73
4	004	04	20	024	14	36	044	24	4	52	064	34	D	68	104	44	T	84	124	54	C _R	100	144	64		116	164	74
5	005	05	21	025	15	37	045	25	5	53	065	35	E	69	105	45	U	85	125	55	F _F	101	145	65		117	165	75
6	006	06	22	026	16	38	046	26	6	54	066	36	F	70	106	46	V	86	126	56	°	102	146	66		118	166	76
7	007	07	23	027	17	39	047	27	7	55	067	37	G	71	107	47	W	87	127	57	±	103	147	67		119	167	77
8	010	08	24	030	18	40	050	28	8	56	070	38	H	72	110	48	X	88	130	58	N _L	104	150	68		120	170	78
9	011	09	25	031	19	41	051	29	9	57	071	39	I	73	111	49	Y	89	131	59	V _T	105	151	69	≤	121	171	79
10	012	0A	26	032	1A	42	052	2A	:	58	072	3A	J	74	112	4A	Z	90	132	5A		106	152	6A	≥	122	172	7A
11	013	0B	27	033	1B	43	053	2B	:	59	073	3B	K	75	113	4B	|	91	133	5B		107	153	6B	π	123	173	7B
12	014	0C	28	034	1C	44	054	2C	<	60	074	3C	L	76	114	4C	\	92	134	5C		108	154	6C	≠	124	174	7C
13	015	0D	29	035	1D	45	055	2D	=	61	075	3D	M	77	115	4D	|	93	135	5D		109	155	6D	∞	125	175	7D
14	016	0E	30	036	1E	46	056	2E	>	62	076	3E	N	78	116	4E	^	94	136	5E		110	156	6E	•	126	176	7E
15	017	0F	31	037	1F	47	057	2F	?	63	077	3F	O	79	117	4F		95	137	5F		111	157	6F	▒	127	177	7F

Displayed Character

%	37 045 25
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 Decimal Octal Hex

DG
Exhibit DG

ISO 8859/1.2 Character Set

	128 200 80	D _S	144 220 90		160 240 A0	°	176 260 80	À	192 300 C0	Đ	208 320 D0	à	224 340 E0	ò	240 360 F0
	129 201 81		145 221 91	ı	161 241 A1	±	177 261 81	Á	193 301 C1	Ñ	209 321 D1	á	225 341 E1	ñ	241 361 F1
	130 202 82		146 222 92	ϕ	162 242 A2	2	178 262 82	Â	194 302 C2	Ò	210 322 D2	â	226 342 E2	ó	242 362 F2
	131 203 83		147 223 93	ϕ	163 243 A3	3	179 263 83	Ã	195 303 C3	Ó	211 323 D3	ã	227 343 E3	ó	243 363 F3
I _D	132 204 84		148 224 94	ϕ	164 244 A4	'	180 264 84	Ä	196 304 C4	Ô	212 324 D4	ä	228 344 E4	ô	244 364 F4
N _E	133 205 85		149 225 95	ϕ	165 245 A5	μ	181 265 85	Å	197 305 C5	Õ	213 325 D5	å	229 345 E5	õ	245 365 F5
	134 206 86		150 226 96	|	166 246 A6	¶	182 266 86	Æ	198 306 C6	Ö	214 326 D6	æ	230 346 E6	ö	246 366 F6
	135 207 87		151 227 97	§	167 247 A7	.	183 267 87	Ç	199 307 C7	×	215 327 D7	ç	231 347 E7	+	247 367 F7
H _S	136 210 88		152 230 98	::	168 250 A8	,	184 270 88	È	200 310 C8	Ø	216 330 D8	è	232 350 E8	ø	248 370 F8
	137 211 89		153 231 99	©	169 251 A9	ı	185 271 89	É	201 311 C9	Ù	217 331 D9	é	233 351 E9	ù	249 371 F9
	138 212 8A		154 232 9A	à	170 252 AA	Ω	186 272 8A	Ê	202 312 CA	Ú	218 332 DA	ê	234 352 EA	ú	250 372 FA
	139 213 8B	C _I	155 233 9B	«	171 253 AB	»	187 273 8B	Ë	203 313 CB	Û	219 333 DB	ë	235 353 EB	û	251 373 FB
	140 214 8C	S _T	156 234 9C	└	172 254 AC	1/4	188 274 8C	Ì	204 314 CC	Ü	220 334 DC	ì	236 354 EC	ü	252 374 FC
R _I	141 215 8D		157 235 9D	—	173 255 AD	1/2	189 275 8D	Í	205 315 CD	Ý	221 335 DD	í	237 355 ED	ý	253 375 FD
S ₂	142 216 8E		158 236 9E	®	174 256 AE	3/4	190 276 8E	Î	206 316 CE	Ï	222 336 DE	î	238 356 EE	ï	254 376 FE
S ₃	143 217 8F		159 237 9F	—	175 257 AF	ı	191 277 8F	Ï	207 317 CF	ß	223 337 DF	ï	239 357 EF	ÿ	255 377 FF

Displayed Character

C _I	155 233 9B
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 Decimal Octal Hex

DG
Exhibit D7

Steuerzeichenfolge des Terminals 97801-5xx

Zeichensatz: ISO 8859-1 (nur 8-bit-Modus)

SNI
Exhibit E1

					b ₇	b ₆	b ₅	b ₄	b ₃	b ₂	b ₁	b ₀
					0	0	0	0	0	0	1	1
					0	0	0	0	1	1	1	1
					0	0	1	1	0	0	1	1
					0	1	0	1	0	1	0	1
					00	01	02	03	04	05	06	07
					08	09	10	11	12	13	14	15
a ₃	a ₂	a ₁	a ₀	b ₃								
0	0	0	0	00			SP	0	@	P	`	p
0	0	0	1	01			!	1	A	Q	a	q
0	0	1	0	02			"	2	B	R	b	r
0	0	1	1	03			#	3	C	S	c	s
0	1	0	0	04			\$	4	D	T	d	t
0	1	0	1	05			%	5	E	U	e	u
0	1	1	0	06			&	6	F	V	f	v
0	1	1	1	07			'	7	G	W	g	w
1	0	0	0	08			(	8	H	X	h	x
1	0	0	1	09			)	9	I	Y	i	y
1	0	1	0	10			*	:	J	Z	j	z
1	0	1	1	11			+	;	K	[	k	{
1	1	0	0	12			,	<	L	\	l	|
1	1	0	1	13			-	=	M	]	m	}
1	1	1	0	14			.	>	N	^	n	~
1	1	1	1	15			/	?	O	_	o	

Zeichensatz: Klammern

SNI
Exhibit E2

	0	1	2	3	4	5	6	7	
0				┐	|	|	|	|	0
1			┌	└	—	⊙	—	≡	1
2			┌	┐	┌	┌	┌	┌	2
3			■	└	┌	┌	┌	┌	3
4			■	<	L	L	L	L	4
5			┌	>	J	J	J	J	5
6			┌	∨	┌	┌	┌	┌	6
7			■	^	┌	┌	┌	┌	7
8			■	/	┌	∨	┌	∨	8
9			<	\	┌	∧	┌	∧	9
A			⊗	\	┌	┌	┌	┌	A
B			□	/	→	┌	→	┌	B
C			·	┐	←	▬	←	┌	C
D			▷	⌘	↑	▬	↑	σ	D
E			◁	◉	↓	▬	↓	τ	E
F			<	○	|	▬	|		F
	0	1	2	3	4	5	6	7	

Zeichensatz Klammern

Steuerzeichenfolge des Terminals 97801-5xx

Zeichensatz: Facet

SNI
Exhibit E3

	0	1	2	3	4	5	6	7	
0									0
1									1
2									2
3									3
4									4
5									5
6									6
7									7
8									8
9									9
A									A
B									B
C									C
D									D
E									E
F									F
	0	1	2	3	4	5	6	7	

The table contains a grid of 8x8 cells. The top and bottom rows and columns are labeled with digits 0-7. The left and right rows and columns are labeled with digits 0-9 and letters A-F. The grid is filled with black and white patterns. In the bottom-right quadrant, there are two distinct patterns: a grid of horizontal lines and a grid of dots. The text 'SNI' and 'Exhibit E3' is written in the top right area of the page.

	0	1	2	3	4	5	6	7	
0				▶	.	10	0	0	0
1			☺	▲	01	11	1	1	1
2			☹	↕	02	12	2	2	2
3			♥	!!	03	13	3	3	3
4			♦	π	04	14	4	4	4
5			♣	△	05	15	5	5	5
6			♠	▬	06	16	6	6	6
7			●	↕	07	17	7	7	7
8			◼	↑	08	18	8	8	8
9			○	↓	09	19	9	9	9
A			◻	→	0A	1A	-	-	A
B			♀	↑	0B	1B	+	+	B
C			♁	┌	0C	1C	≈	8	C
D			♫	↕	0D	1D	Σ	α	D
E			♫	▲	0E	1E	∫	∅	E
F			⚙	▼	0F	1F	J		F

Zeichensatz: Mathematisch

SNI
Exhibit E5

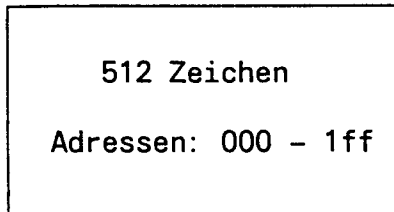
	0	1	2	3	4	5	6	7	
0				i	$\frac{1}{8}$				0
1				¢	$\frac{3}{8}$				1
2				¥	$\frac{5}{8}$				2
3				«	$\frac{7}{8}$				3
4				»	<u>a</u>				4
5				±	#				5
6				×	h				6
7				÷	l				7
8				$\frac{1}{4}$	l				8
9				$\frac{1}{2}$	<u>o</u>				9
A				$\frac{3}{4}$	F				A
B				¿	€				B
C				•	∩				C
D				¿	∩				D
E				—	h				E
F				™	||				F
	0	1	2	3	4	5	6	7	

Zeichensatz Mathematisch

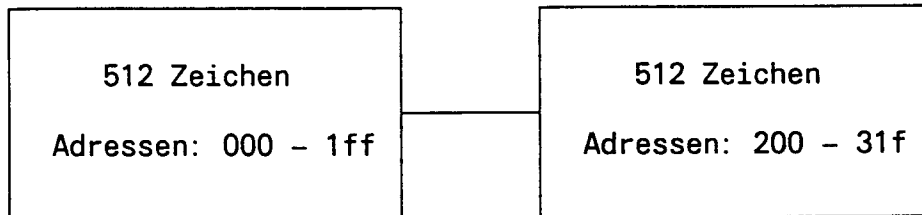
Zeichengenerator

Der verwendete Zeichengenerator enthält im 7-bit-Modus 512 und im 8-bit-Modus 1024 verschiedene Zeichen mit einer Auflösung von 8x16 Punkten.

7-bit-Modus:



8-bit-Modus:



Der Bereich von 320 bis 3ff wird derzeit nicht genutzt. Er kann aber mit zusätzlichen Zeichen per Steuersequenz nachgeladen werden.

Bei der Darstellung auf dem Bildschirm kommt in beiden Fällen eine Auflösung von 9 Spalten zur Anwendung.

Um dies mit der gegebenen Matrixgenerator-Information zu ermöglichen, wird durch eine Zusatzschaltung vor jedem Zeichen eine zusätzliche Spalte eingefügt. Diese Spalte beinhaltet normalerweise Leerinformation.

Nur bei Zeichen des Facet-Zeichensatzes, die das volle Zeichenraster beanspruchen, wird die Information der 8. Reihe dieses Zeichens verdoppelt. Dadurch ist eine durchgehend Darstellung möglich.

EG, P. 2/8

Zeichengenerator

000	001	002	003	004	005	006	007	008	009	00a	00b	00c	00d	00e	00f
010	011	012	013	014	015	016	017	018	019	01a	01b	01c	01d	01e	01f
020	021	022	023	024	025	026	027	028	029	02a	02b	02c	02d	02e	02f
030	031	032	033	034	035	036	037	038	039	03a	03b	03c	03d	03e	03f
040	041	042	043	044	045	046	047	048	049	04a	04b	04c	04d	04e	04f
050	051	052	053	054	055	056	057	058	059	05a	05b	05c	05d	05e	05f
060	061	062	063	064	065	066	067	068	069	06a	06b	06c	06d	06e	06f
070	071	072	073	074	075	076	077	078	079	07a	07b	07c	07d	07e	07f

080 081 082 083 084 085 086 087 088 089 08a 08b 08c 08d 08e 08f

090 091 092 093 094 095 096 097 098 099 09a 09b 09c 09d 09e 09f

0a0 0a1 0a2 0a3 0a4 0a5 0a6 0a7 0a8 0a9 0aa 0ab 0ac 0ad 0ae 0af

0b0 0b1 0b2 0b3 0b4 0b5 0b6 0b7 0b8 0b9 0ba 0bb 0bc 0bd 0be 0bf

0c0 0c1 0c2 0c3 0c4 0c5 0c6 0c7 0c8 0c9 0ca 0cb 0cc 0cd 0ce 0cf

0d0 0d1 0d2 0d3 0d4 0d5 0d6 0d7 0d8 0d9 0da 0db 0dc 0dd 0de 0df

0e0 0e1 0e2 0e3 0e4 0e5 0e6 0e7 0e8 0e9 0ea 0eb 0ec 0ed 0ee 0ef

0f0 0f1 0f2 0f3 0f4 0f5 0f6 0f7 0f8 0f9 0fa 0fb 0fc 0fd 0fe 0ff

Zeichengenerator

E6, P. 4/8

100	101	102	103	104	105	106	107	108	109	10a	10b	10c	10d	10e	10f
110	111	112	113	114	115	116	117	118	119	11a	11b	11c	11d	11e	11f
120	121	122	123	124	125	126	127	128	129	12a	12b	12c	12d	12e	12f
130	131	132	133	134	135	136	137	138	139	13a	13b	13c	13d	13e	13f
140	141	142	143	144	145	146	147	148	149	14a	14b	14c	14d	14e	14f
150	151	152	153	154	155	156	157	158	159	15a	15b	15c	15d	15e	15f
160	161	162	163	164	165	166	167	168	169	16a	16b	16c	16d	16e	16f
170	171	172	173	174	175	176	177	178	179	17a	17b	17c	17d	17e	17f

180 181 182 183 184 185 186 187 188 189 18a 18b 18c 18d 18e 18f

190 191 192 193 194 195 196 197 198 199 19a 19b 19c 19d 19e 19f

1a0 1a1 1a2 1a3 1a4 1a5 1a6 1a7 1a8 1a9 1aa 1ab 1ac 1ad 1ae 1af

1b0 1b1 1b2 1b3 1b4 1b5 1b6 1b7 1b8 1b9 1ba 1bb 1bc 1bd 1be 1bf

1c0 1c1 1c2 1c3 1c4 1c5 1c6 1c7 1c8 1c9 1ca 1cb 1cc 1cd 1ce 1cf

1d0 1d1 1d2 1d3 1d4 1d5 1d6 1d7 1d8 1d9 1da 1db 1dc 1dd 1de 1df

1e0 1e1 1e2 1e3 1e4 1e5 1e6 1e7 1e8 1e9 1ea 1eb 1ec 1ed 1ee 1ef

1f0 1f1 1f2 1f3 1f4 1f5 1f6 1f7 1f8 1f9 1fa 1fb 1fc 1fd 1fe 1ff

1g0 1g1 1g2 1g3 1g4 1g5 1g6 1g7 1g8 1g9 1ga 1gb 1gc 1gd 1ge 1gf

1h0 1h1 1h2 1h3 1h4 1h5 1h6 1h7 1h8 1h9 1ha 1hb 1hc 1hd 1he 1hf

1i0 1i1 1i2 1i3 1i4 1i5 1i6 1i7 1i8 1i9 1ia 1ib 1ic 1id 1ie 1if

1j0 1j1 1j2 1j3 1j4 1j5 1j6 1j7 1j8 1j9 1ja 1jb 1jc 1jd 1je 1jf

1k0 1k1 1k2 1k3 1k4 1k5 1k6 1k7 1k8 1k9 1ka 1kb 1kc 1kd 1ke 1kf

1l0 1l1 1l2 1l3 1l4 1l5 1l6 1l7 1l8 1l9 1la 1lb 1lc 1ld 1le 1lf

1m0 1m1 1m2 1m3 1m4 1m5 1m6 1m7 1m8 1m9 1ma 1mb 1mc 1md 1me 1mf

1n0 1n1 1n2 1n3 1n4 1n5 1n6 1n7 1n8 1n9 1na 1nb 1nc 1nd 1ne 1nf

1o0 1o1 1o2 1o3 1o4 1o5 1o6 1o7 1o8 1o9 1oa 1ob 1oc 1od 1oe 1of

1p0 1p1 1p2 1p3 1p4 1p5 1p6 1p7 1p8 1p9 1pa 1pb 1pc 1pd 1pe 1pf

1q0 1q1 1q2 1q3 1q4 1q5 1q6 1q7 1q8 1q9 1qa 1qb 1qc 1qd 1qe 1qf

1r0 1r1 1r2 1r3 1r4 1r5 1r6 1r7 1r8 1r9 1ra 1rb 1rc 1rd 1re 1rf

1s0 1s1 1s2 1s3 1s4 1s5 1s6 1s7 1s8 1s9 1sa 1sb 1sc 1sd 1se 1sf

1t0 1t1 1t2 1t3 1t4 1t5 1t6 1t7 1t8 1t9 1ta 1tb 1tc 1td 1te 1tf

1u0 1u1 1u2 1u3 1u4 1u5 1u6 1u7 1u8 1u9 1ua 1ub 1uc 1ud 1ue 1uf

1v0 1v1 1v2 1v3 1v4 1v5 1v6 1v7 1v8 1v9 1va 1vb 1vc 1vd 1ve 1vf

1w0 1w1 1w2 1w3 1w4 1w5 1w6 1w7 1w8 1w9 1wa 1wb 1wc 1wd 1we 1wf

1x0 1x1 1x2 1x3 1x4 1x5 1x6 1x7 1x8 1x9 1xa 1xb 1xc 1xd 1xe 1xf

1y0 1y1 1y2 1y3 1y4 1y5 1y6 1y7 1y8 1y9 1ya 1yb 1yc 1yd 1ye 1yf

1z0 1z1 1z2 1z3 1z4 1z5 1z6 1z7 1z8 1z9 1za 1zb 1zc 1zd 1ze 1zf

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Zeichengenerator

EG, P. 6/8

200	201	202	203	204	205	206	207	208	209	20a	20b	20c	20d	20e	20f
210	211	212	213	214	215	216	217	218	219	21a	21b	21c	21d	21e	21f
220	221	222	223	224	225	226	227	228	229	22a	22b	22c	22d	22e	22f
230	231	232	233	234	235	236	237	238	239	23a	23b	23c	23d	23e	23f
240	241	242	243	244	245	246	247	248	249	24a	24b	24c	24d	24e	24f
250	251	252	253	254	255	256	257	258	259	25a	25b	25c	25d	25e	25f
260	261	262	263	264	265	266	267	268	269	26a	26b	26c	26d	26e	26f
270	271	272	273	274	275	276	277	278	279	27a	27b	27c	27d	27e	27f

280	281	282	283	284	285	286	287	288	289	29a	29b	29c	29d	29e	29f
290	291	292	293	294	295	296	297	298	299	29a	29b	29c	29d	29e	29f
2a0	2a1	2a2	2a3	2a4	2a5	2a6	2a7	2a8	2a9	2aa	2ab	2ac	2ad	2ae	2af
2b0	2b1	2b2	2b3	2b4	2b5	2b6	2b7	2b8	2b9	2ba	2bb	2bc	2bd	2be	2bf
2c0	2c1	2c2	2c3	2c4	2c5	2c6	2c7	2c8	2c9	2ca	2cb	2cc	2cd	2ce	2cf
2d0	2d1	2d2	2d3	2d4	2d5	2d6	2d7	2d8	2d9	2da	2db	2dc	2dd	2de	2df
2e0	2e1	2e2	2e3	2e4	2e5	2e6	2e7	2e8	2e9	2ea	2eb	2ec	2ed	2ee	2ef
2f0	2f1	2f2	2f3	2f4	2f5	2f6	2f7	2f8	2f9	2fa	2fb	2fc	2fd	2fe	2ff

Exhibit F1

set	Predefined Character Set
@	Native mode
A	Multinational
B	Standard ASCII
C	Graphics 1
D	PC equivalent
E	Graphics 2
F	Graphics 3
G	Standard ANSI
'	44-line native mode
a	44-line multinational
b	44-line PC equivalent
c	44-line Standard ASCII
d	44-line Standard ANSI

Figure 7-2 shows the predefined character sets.

Figure 7-2 Predefined Character Sets

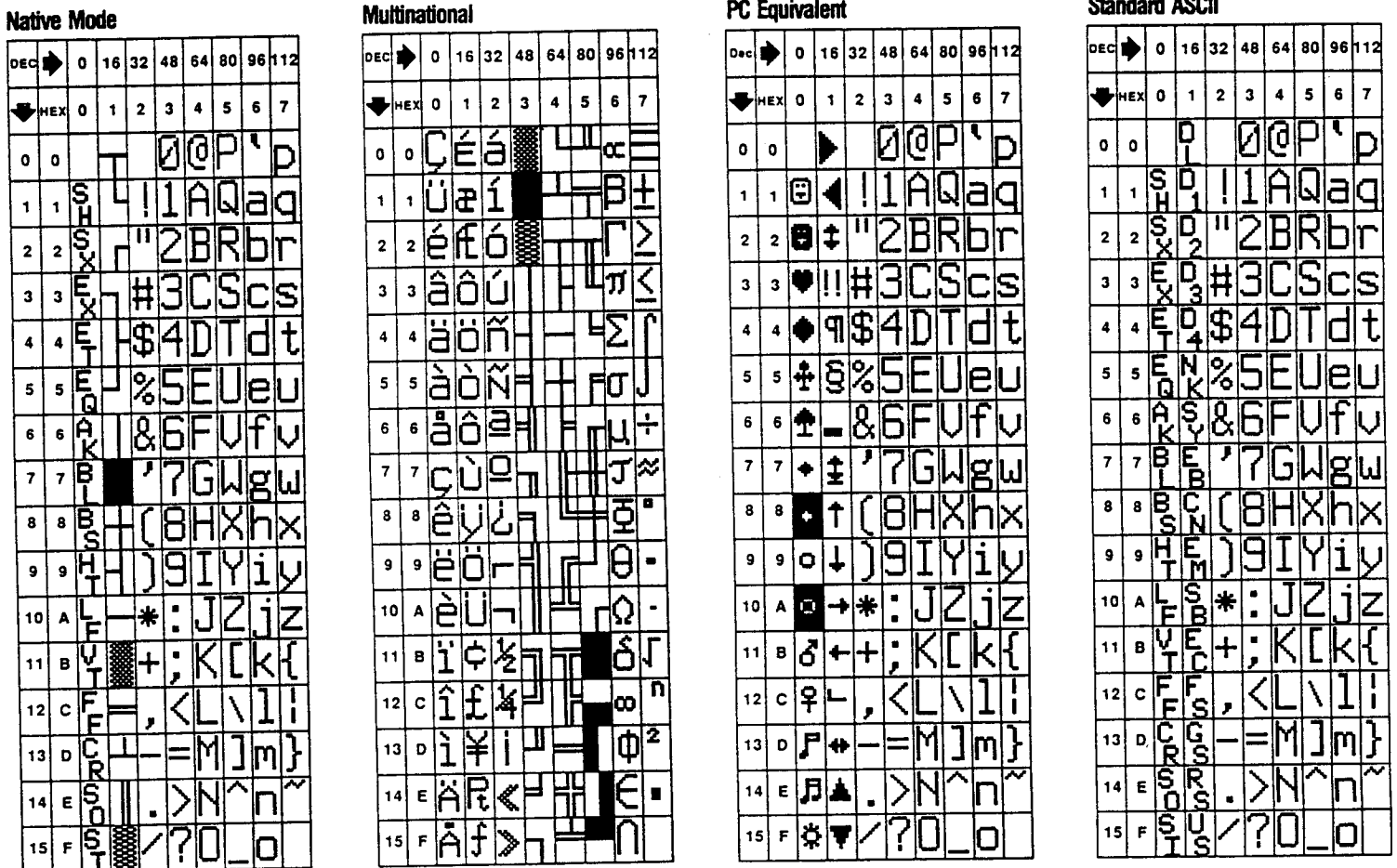


Exhibit F2

Figure 7-2 Predefined Character Sets, Continued

Graphics 1

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0		0				0	
1	1		1				1	
2	2		2				2	
3	3		3				3	
4	4		4				4	
5	5		5				5	
6	6		6				6	
7	7		7				7	
8	8		8				8	
9	9		9				9	
10	A							
11	B							
12	C		▶					
13	D		◀					
14	E		▲					
15	F		▼					

Graphics 2

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0							
1	1							
2	2							
3	3							
4	4							
5	5							
6	6							
7	7							
8	8							
9	9							
10	A							
11	B							
12	C							
13	D							
14	E							
15	F							

Graphics 3

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0							
1	1							
2	2							
3	3							
4	4							
5	5							
6	6							
7	7							
8	8							
9	9							
10	A							
11	B							
12	C							
13	D							
14	E							
15	F							

Exhibit F-3

Figure 7-2 Predefined Character Sets, Continued

Standard ANSI

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0			0@P'	p			
1	1	◆	!	1AQAq				
2	2	■	"	2BRbr				
3	3	H	L	#3CScs				
4	4	F	F	\$4DTdt				
5	5	R	C	%5EUeu				
6	6	F	H	&6FUfv				
7	7	°	'	7GWgw				
8	8	±	(	8HXhx				
9	9	N	)	9IYiy				
10	A	U	≤	*:JZjz				
11	B	∑	+	;K[k{				
12	C	π	,	<L\l!				
13	D	≠	-	=M]m}				
14	E	£	.	>N^n~				
15	F	H	.	/?O_o				

ANSI Graphics

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0			0@P	◆			
1	1	◆	!	1AQA	■			
2	2	■	"	2BR	H			
3	3	H	L	#3CS	F			
4	4	F	F	\$4DT	C	R		
5	5	R	C	%5EU	F	H		
6	6	F	H	&6FU	°			
7	7	°	'	7GW	±			
8	8	±	(	8HX	N			
9	9	N	)	9IY	U	≤		
10	A	U	≤	*:JZ	U	≥		
11	B	∑	+	;K[	h	π		
12	C	π	,	<L\	l	≠		
13	D	≠	-	=M]	m	£		
14	E	£	.	>N^	n	H	.	
15	F	H	.	/?O				

UK ANSI

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0	0			0@P'	p			
1	1	◆	!	1AQAq				
2	2	■	"	2BRbr				
3	3	H	L	£3CScs				
4	4	F	F	\$4DTdt				
5	5	R	C	%5EUeu				
6	6	F	H	&6FUfv				
7	7	°	'	7GWgw				
8	8	±	(	8HXhx				
9	9	N	)	9IYiy				
10	A	U	≤	*:JZjz				
11	B	∑	+	;K[k{				
12	C	π	,	<L\l!				
13	D	≠	-	=M]m}				
14	E	£	.	>N^n~				
15	F	H	.	/?O_o				

If ACK mode is on, the terminal sends an ACK character to the computer after loading or clearing a font bank.

- Note** If you clear a font bank from the activated primary or secondary character set, the screen blanks until you load the font bank again.

Designing and Loading Characters

To design and load a character, follow these steps:

1. Load one of the font banks with the predefined character set that will contain the new character.

CONTROLS DISPLAY MODE

When the Controls setup parameter is set to *display*, the terminal displays received codes instead of executing them. This is useful for debugging programs. In controls display mode, the terminal displays symbolic representations of the C0 and C1 control characters.

The following illustrations show the characters displayed in controls display mode.

DEC	0	16	32	48	64	80	96	112
HEX	0	1	2	3	4	5	6	7
0		D _L		0	@	P	`	p
1	S _H	D ₁	!	1	A	Q	a	q
2	S _X	D ₂	"	2	B	R	b	r
3	E _X	D ₃	#	3	C	S	c	s
4	E _T	D ₄	\$	4	D	T	d	t
5	E _O	N _K	%	5	E	U	e	u
6	A _K	S _Y	&	6	F	V	f	v
7	B _L	E _B	'	7	G	W	g	w
8	B _S	C _N	(	8	H	X	h	x
9	H _T	E _M	)	9	I	Y	i	y
10	L _F	?	*	:	J	Z	j	z
11	V _T	E _C	+	;	K	[	k	{
12	F _F	F _S	,	<	L	\	l	|
13	C _R	G _S	-	=	M	]	m	}
14	S _O	R _S	.	>	N	^	n	~
15	S _I	U _S	/	?	O	_	o	D _T

DEC	128	144	160	176	192	208	224	240
HEX	8	9	A	B	C	D	E	F
0	8 ₀	D _C		°	À	Ð	à	ð
1	8 ₁	P ₁	i	±	Á	Ñ	á	ñ
2	8 ₂	P ₂	ç	²	Â	Ò	â	ò
3	8 ₃	S _E	£	³	Ã	Ó	ã	ó
4	I _N	C _C	¤	'	Ä	Ô	ä	ô
5	N _L	M _W	¥	μ	Å	Õ	å	õ
6	S _S	S _P	|	¶	Æ	Ö	æ	ö
7	E _S	E _P	§	·	Ç	×	ç	÷
8	H _S	9 ₈	-	,	È	Ø	è	ø
9	H _J	9 ₉	©	¹	É	Ù	é	ù
10	V _S	9 _A	ª	º	Ê	Ú	ê	ú
11	P _D	C _S	<<	>>	Ë	Û	ë	û
12	P _U	S _T	¬	¼	Ï	Ü	ï	ü
13	R _I	O _S	-	½	Í	Ý	í	ý
14	S ₂	P _M	®	¾	Î	Þ	î	þ
15	S ₃	A _P	-	¿	Ï	Û	ï	ü

Controls Display Mode (Characters Displayed in 74 Hz Screen Resolution)

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DEC	0	16	32	48	64	80	96	112	
HEX	0	1	2	3	4	5	6	7	
0	0		␣		0	@	P	`	p
1	1	S _H	␣	!	1	A	Q	a	q
2	2	S _X	␣	"	2	B	R	b	r
3	3	E _X	␣	#	3	C	S	c	s
4	4	E _T	=	\$	4	D	T	d	t
5	5	E _Q	||	%	5	E	U	e	u
6	6	A _K	█	&	6	F	V	f	v
7	7	B _L	█	'	7	G	W	g	w
8	8	B _S	█	(	8	H	X	h	x
9	9	H _T	█	)	9	I	Y	i	y
10	A	L _F	␣	*	:	J	Z	j	z
11	B	V _T	␣	+	;	K	[	k	{
12	C	F _F	ij	,	<	L	\	|	|
13	D	C _R	f	-	=	M	]	m	}
14	E	S _O	?	.	>	N	^	n	~
15	F	S _I		/	?	O	_	o	D _T

DEC	128	144	160	176	192	208	224	240	
HEX	8	9	A	B	C	D	E	F	
0	0	◆	—		°	À	Ð	à	ð
1	1	⊠	—	i	±	Á	Ñ	á	ñ
2	2	H _T	—	¢	²	Â	Ò	â	ò
3	3	F _F	—	£	³	Ã	Ó	ã	ó
4	4	C _R	␣	¤	'	Ä	Ô	ä	ô
5	5	L _F	␣	¥	μ	Å	Õ	å	õ
6	6	°	␣	¶	¶	Æ	Ö	æ	ö
7	7	±	␣	§	·	Ç	×	ç	÷
8	8	N _L	␣	-	,	È	Ø	è	ø
9	9	V _T	≤	©	¹	É	Ù	é	ù
10	A	␣	≥	ª	º	Ê	Ú	ê	ú
11	B	␣	π	«	»	Ë	Û	ë	û
12	C	␣	≠	¬	¼	Ì	Ü	ì	ü
13	D	L	£	-	½	Í	Ý	í	ý
14	E	␣	•	®	¾	Î	Þ	î	þ
15	F	—	▲	-	¿	Ï	ß	ï	ÿ

Controls Display Mode (Characters Displayed in 60 Hz Screen Resolution)

Wy 370 Exhibit G2

A

ANSI Character Sets

DEC = decimal, HEX = hexadecimal; read across and then down.

DEC	0	16
HEX	0	1
0	0	NUL DLE
1	1	SOH DC1
2	2	STX DC2
3	3	ETX DC3
4	4	EOT DC4
5	5	ENQ NAK
6	6	ACK SYN
7	7	BEL ETB
8	8	BS CAN
9	9	HT EM
10	A	LF SUB
11	B	VT ESC
12	C	FF FS
13	D	CR GS
14	E	SO RS
15	F	SI US

C0

DEC	32	48	64	80	96	112	
HEX	2	3	4	5	6	7	
0	0	SP	0	@	P	`	p
1	1	!	1	A	Q	a	q
2	2	"	2	B	R	b	r
3	3	#	3	C	S	c	s
4	4	\$	4	D	T	d	t
5	5	%	5	E	U	e	u
6	6	&	6	F	V	f	v
7	7	'	7	G	W	g	w
8	8	(	8	H	X	h	x
9	9	)	9	I	Y	i	y
10	A	*	:	J	Z	j	z
11	B	+	;	K	[	k	{
12	C	,	<	L	\	l	|
13	D	-	=	M	]	m	}
14	E	.	>	N	^	n	~
15	F	/	?	O	_	o	DEL

ASCII

DEC	32	48	64	80	96	112	
HEX	2	3	4	5	6	7	
0	0	SP	0	@	P	◆	—
1	1	!	1	A	Q	⊞	—
2	2	"	2	B	R	H _T	—
3	3	#	3	C	S	F _F	—
4	4	\$	4	D	T	C _R	—
5	5	%	5	E	U	L _F	—
6	6	&	6	F	V	°	—
7	7	'	7	G	W	±	—
8	8	(	8	H	X	N _L	—
9	9	)	9	I	Y	V _T	≤
10	A	*	:	J	Z	┘	≥
11	B	+	;	K	[	┘	π
12	C	,	<	L	\	┘	≠
13	D	-	=	M	]	L	£
14	E	.	>	N	^	┘	•
15	F	/	?	O	_	—	DEL

Special Graphics

wy370 Exhibit G3

Appendix A

DEC	HEX	128	144
		8	9
0	0		DCS
1	1		PU1
2	2		PU2
3	3		STS
4	4	IND	CCH
5	5	NEL	MW
6	6	SSA	SPA
7	7	ESA	EPA
8	8	HTS	
9	9	HTJ	
10	A	VTS	
11	B	PLD	CSI
12	C	PLU	ST
13	D	RI	OSC
14	E	SS2	PM
15	F	SS3	APC

C1

DEC	HEX	160	176	192	208	224	240
		A	B	C	D	E	F
0	0	◻	°	À		à	
1	1	ı	±	Á	Ñ	á	ñ
2	2	¢	²	Â	Ò	â	ò
3	3	£	³	Ã	Ó	ã	ó
4	4			Ä	Ô	ä	ö
5	5	¥	μ	Å	Õ	å	õ
6	6		¶	Æ	Ö	æ	ö
7	7	§	·	Ç	œ	ç	œ
8	8	¸		È	Ø	è	ø
9	9	©	¹	É	Ù	é	ù
10	A	ª	º	Ê	Ú	ê	ú
11	B	<>		Ë	Û	ë	û
12	C		¼	Ì	Ü	ì	ü
13	D		½	Í	Ý	í	ý
14	E			Î		î	
15	F		¿	Ï	ß	ï	◻

Multinational Supplemental

DEC	HEX	160	176	192	208	224	240
		A	B	C	D	E	F
0	0	␣	°	À	Đ	à	đ
1	1	ı	±	Á	Ñ	á	ñ
2	2	¢	²	Â	Ò	â	ò
3	3	£	³	Ã	Ó	ã	ó
4	4	¸	'	Ä	Ô	ä	ö
5	5	¥	μ	Å	Õ	å	õ
6	6	|	¶	Æ	Ö	æ	ö
7	7	§	·	Ç	×	ç	÷
8	8	-	,	È	Ø	è	ø
9	9	©	¹	É	Ù	é	ù
10	A	ª	º	Ê	Ú	ê	ú
11	B	<>		Ë	Û	ë	û
12	C	¬	¼	Ì	Ü	ì	ü
13	D	-	½	Í	Ý	í	ý
14	E	®	¾	Î	Þ	î	þ
15	F	-	¿	Ï	ß	ï	ÿ

ISO Latin-1 Supplemental

wy370 Exhibit G4

Figure A-4 lists and explains the symbols displayed in the 3276, 3278, and 3279 Operator Information Area.


Readiness and System Connection Symbols (locations 1 through 6)

Symbol	Name	Explanation
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">6</div> <div style="border: 1px solid black; padding: 2px;">4</div> </div>	3276 Ready 3274 Ready	The appropriate ready symbol is displayed in location 1 of the Operator Information Area when the 3276 6 or 3274 4 control unit to which the display is attached is ready (functional) and the display is ready.
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border-bottom: 1px solid black; margin-bottom: 2px;">A</div> <div style="border-bottom: 1px solid black; margin-bottom: 2px;">B</div> </div>	Online A Online B	<p>The Online <u>A</u> and Online <u>B</u> symbols govern transactions with the host system. Certain keyboard functions and the meaning of some Operator Information Area symbols differ depending upon which set of rules are applicable.</p> <p><u>Online A.</u> The control unit is connected to the system under <u>A</u> rules. The <u>A</u> symbol appears in remote systems using BSC protocol, in locally attached systems that use the 3274-1B or -1D. It is turned on by receipt of the following commands: Write, Erase/Write, Erase All Unprotected, Copy, Read Modified, and Read Buffer.</p> <p>The <u>A</u> symbol is turned off when:</p> <ol style="list-style-type: none"> 1. An operator action causes host communication. 2. The display station is turned off. 3. The Normal/Test switch is placed in Test, or the TEST key is pressed to place the 3274 in test mode. <p><u>Online B.</u> The control unit is connected to the system under <u>B</u> rules. The <u>B</u> symbol appears in systems that use SNA protocol. It is turned on by completion of an ACTPU/ACTLU command sequence, and is turned off by execution of DACTPU or DACTLU, including an internal DACTPU sequence, and when the Normal/Test switch is placed in Test or the TEST key is pressed.</p>
■	My Job	The display station is connected to the operator's application program. This symbol is displayed in position 3. This symbol appears in systems that use BSC or SNA protocol, or in systems that use the 3274-1B and -1D. In systems using BSC or the 3274-1B or -1D, it is turned on with the <u>A</u> symbol, and is turned off when power is removed, and when the Normal/Test switch is placed in Test. When using SNA protocol, it is turned on when the operator's application session owns the screen.
⊠	System Operator	This symbol is used with SNA protocol and indicates that the system operator (SSCP Control Program) session owns the display screen. Except for the ENTER key, the Program Attention keys are not functional when this symbol is displayed.

Figure A-4 (Part 1 of 10). Operator Information Area

Exhibit H1, p. 1/10

Readiness and System Connection Symbols (locations 1 through 6)

Symbol	Name	Explanation
	Unowned	The display station is connected to the system (using SNA only), but not to the operator's application program or to the system operator (control program). The SYS REQ key is used if LOGON is required. This symbol is displayed in position 3.
TEST	Test	The display station is in test mode. Test mode is initiated or terminated by pressing the TEST key while holding the ALT key. TEST is displayed in positions 3 through 6. Test procedures are described in the <i>IBM 3270 Information Display System: 3276 Control Unit Display Station; Problem Determination Guide, GA18-2014</i> , the <i>IBM 3270 Information Display System: 3278 Display Station; Problem Determination Guide, GA27-2639</i> , and the <i>IBM 3270 Information Display System: Problem Determination Guide, GA33-3051</i> .

Do Not Enter (Input Inhibited), locations 9 through 17: All these symbols contain an "X" in position 9 (do not enter), combined with other symbols in positions 11 through 17, which define why input is disabled. The keyboard does not lock mechanically, but a change in state of the keyboard clicker (on to off, or off to on) indicates that the keyboard is disabled.


The following keys are not disabled: RESET, SYS REQ, ATTN, TEST, DEV CNCL, shift keys, ALT CURSR, CURSR BLINK, and Click keys.

Also, during an unsolicited write (3274 only) or during buffer transfer while executing a BSC Copy command (3274 and 3276), a limited number of keystrokes will be accepted for processing, and input is not disabled. The 3274 will queue up to four keystrokes, and, if the queue capacity is not exceeded, the 3274 will process the input normally when the host restores the keyboard. The 3276 will queue at least two keystrokes and, if the queue is not exceeded, the keystrokes will be processed when communication with the keyboard is restored. In either case, if the capacity of the queue is exceeded, all queued keystrokes will be discarded and the What symbol is displayed.

RESET will remove the input disabled condition and restore the keyboard except when the following symbols are displayed: Time, Printer Busy, Printer Very Busy, Printer Not Working, and Security Key.

For a 3278 or 3279 display without a keyboard, a selector-light-pen or MSR operation will remove the same input disabled conditions as the RESET key. A selector-light-pen or MSR operation will not cause a reset on a 3278 or 3279 display that has a keyboard attached.

The following symbols are arranged in order of probability.

Symbol	Name	Explanation
	Time	Time is required for the system to perform a function. This symbol is displayed due to: <ol style="list-style-type: none"> 1. Line protocol requirements. 2. A keyboard that has been locked by the host; for example, during a host-initiated print operation. 3. Internal processing constraints of the control unit, such as loading of the printer authorization matrix from a 3278 or 3279 Display Station into a 3274.

When operating with SNA protocol, the keyboard will be restored and the Time symbol is removed by a WCC which contains the keyboard restore bit set to 1.

If a "Change Direction" was also received, the 3274 or 3276 will enter send state. However, if a CD was not received, the session will remain in receive

Figure A-4 (Part 2 of 10). Operator Information Area

Symbol	Name	Explanation
		<p>state when the WCC contains the Keyboard Restore bit set to 1.</p> <p>In this state, all keys can be used except the Program Attention and Print keys. Use of a Program Attention key will result in display of the Minus Function symbol. If a WCC which contains a Keyboard Restore bit set is not received, display of the Time symbol is determined by whether the CD has been received, as follows:</p> <ol style="list-style-type: none"> 1. If CD has not been received, the session will remain in receive state and the Time symbol remains displayed with keyboard locked. 2. If CD has been received, the 3274 and 3276 will enter send state; and, if the keyboard was unlocked prior to receipt of the command, the Time symbol is removed and the keyboard is restored. Otherwise, the Time symbol is replaced by the System Lock symbol. <p>If End Bracket is received, the Time symbol is removed, the session enters contention state, and the keyboard is restored regardless of the WCC setting.</p> <p>When using BSC protocol or a 3274-1B or -1D, the keyboard will be unlocked, and the Time symbol removed, if the WCC keyboard restore bit is on, or if the keyboard had been unlocked prior to receipt of the command. Otherwise, Time will be replaced by the System Lock symbol.</p>
X SYSTEM	System Lock	<p>The program has disabled the keyboard following an entry. The operator may receive a message and then press RESET to restore the keyboard. In systems that use SNA protocol, the System Lock symbol appears when the application program has replied to the last message sent by the operator and is requesting the operator to send the next message. At this time, however, the host has not unlocked the keyboard. (The Keyboard Restore bit is not set in any WCC that follows the last message from the operator.)</p> <p>When the System Lock symbol appears in BSC systems, or in locally attached systems that use a 3274-1B or -1D, the host is notified of the last AID generated.</p>
X X B B n n n n n n	Machine Check	<p>The display station is not working properly. The symbol is accompanied by up to three digits [nn (3276, 3278, or 3279 attached to 3276) or nnn (3278 or 3279 attached to 3274)], which define the probable cause of the problem. Recovery procedures depend upon the type of error.</p> <p>Refer to Appendix C for a description of the machine-check codes. Machine check symbols are almost always reset by the operator using the RESET, SYS REQ (SNA only), or TEST keys. If the 3278 or 3279 does not have a keyboard, a selector light pen, an MSR, or an MHS can be used to reset the Machine Check symbol.</p>

Figure A-4 (Part 3 of 10). Operator Information Area

H1, p. 3/10

Symbol	Name	Explanation
XX nn XX nnn	Communication Check	<p>An attempt is made to cause host communication or to use the MSR, MHS, or selector light pen that causes host communication, and a communication link error was detected while the Communications Reminder is displayed. Data cannot be sent. The RESET, TEST, or SYS REQ (SNA) key should be pressed. This symbol is accompanied by up to three digits [nn (3276, 3278, or 3279 attached to 3276) or nnn (3278 or 3279 attached to 3274)], which define the probable cause of the problem. (The Communication Reminder symbol is displayed as long as the condition exists.) Refer to Appendix C for a description of the communication-check codes.</p>
X PROGnn X PROGnnn	Program Check	<p>A programming error was detected in the data received by the control unit. RESET should be pressed and the operation should be retried. This symbol is accompanied by up to three digits [nn (3276, 3278, or 3279 attached to 3276) or nnn (3278 or 3279 attached to 3274)], which define the probable cause of the problem. Refer to Appendix C for a description of the program-check codes.</p>
X ?+	What?	<p>The last input was not accepted. The What symbol appears when:</p> <ol style="list-style-type: none"> 1. Keystrokes are being queued during an unsolicited write or buffer transfer, and the capacity of the queue is exceeded. (The queue is not processed in this case.) 2. ATTN (3274 only) or SYS REQ was pressed while inbound processing was queued for the device. 3. ATTN, SYS REQ, or TEST was pressed during a Time condition which was caused by internal processing constraints of the 3274 or 3276. 4. The operator continued to key while the Time, Printer Busy, or Printer Not Working symbol was displayed. 5. Two conflicting operations have been attempted "simultaneously" with one operation not serviced. (For example, CLEAR and selector light pen.) 6. A dead key operation has been aborted, and a standalone accent created at the cursor location. 7. Print ID mode has been aborted. The RESET key restores the keyboard. <p>Because of uncertainty about what was accepted, the operator should check the contents of the screen before repeating the operation. In addition:</p> <ol style="list-style-type: none"> 1. If ALT or a shift key was used, press the key again and then press RESET and retry the operation. 2. When retrying SYS REQ or ATTN, repeated use of these keys may be necessary if inbound processing is queued.

Figure A-4 (Part 4 of 10). Operator Information Area

H1, p. 4/10

Symbol	Name	Explanation
X -f	Minus Function	<p>A currently unavailable function was requested. RESET should be pressed to restore the keyboard. Conditions that cause a Minus Function are:</p> <ol style="list-style-type: none"> 1. Use of an ATTN, PF, or PA key while in SSCP session or in "unowned state," or prior to ACTLU. Also use of the ENTER key in the "unowned state" or prior to ACTLU. 2. Use of SYS REQ prior to receipt of ACTLU in SNA. 3. Any of the following actions in receive state with the keyboard unlocked: Print and all AID generating keys. 4. Use of ATTN while operating with remote systems that use BSC or local systems that use a 3274-1B or -1D. 5. Use of SYS REQ, ATTN, and any PA or PF key that is not specified for test mode. 6. When invoking concurrent test 0, the control terminal is not the test terminal and the latter is either in session (SNA), or has the Time indicator on in systems that use BSC, or local systems that use a 3274-1B or -1D. 7. When using the IDENT key during a printing operation. 8. MSR/MHS in "receive state" or in "unowned state." 9. MSR in SSCP-LU session with 3275/3277-compatible 10-character set. <p>The security key is turned off and no operator input</p>
X -f x	Minus Function Operator Unauthorized	<p>This symbol means that the display operator has tried to change the Programmed Symbols, Color, or Extended Highlighting attributes when disallowed by the host program. The keyboard is locked as a result. Pressing the Reset key restores the keyboard.</p> <p>The indicator is also displayed when a Programmed Symbols terminal storage is referenced (PS-A — PS-F attribute keys) but the storage has no symbol set currently associated with it, or the symbol set is marked not keyboard-selectable.</p>
X K	Security Key	<p>The security key is turned off and no operator input can be accepted. When the key is turned on, this symbol disappears, but any other pre-existing do-not-enter condition may then be displayed.</p> <p>RESET does not remove the Security Key symbol. The Shift key, ALT CURSR, CURSR BLINK, and Click key, and associated symbols, and all other noninput disabled symbols will function when the Security Key symbol is displayed. The Security Key has priority over other input disabled symbols except when machine checks prevent communication between the control unit and the terminal.</p>
X P	Printer Not Working	<p>The printer assigned to the display station is not functioning, and no other printers in the class are available. If this symbol appears after the Print key was pressed, and if the Printer Failure symbol is not</p>

Figure A-4 (Part 5 of 10). Operator Information Area

H1, p. 5/10

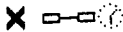
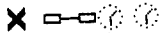

Symbol	Name	Explanation
		<p>displayed, the printer assigned to the display (or the most available printer in the class) is not functional. The print request is cancelled, and the DEV CNCL key should be pressed to restore the keyboard. (RESET has no effect.) Restoration of the printer will not automatically remove the Printer Not Working symbol. If the Printer Failure symbol is displayed in the printer status area, the printer stopped during the last print operation. If the print operation was initiated by the Print key, DEV CNCL should be pressed to restore the keyboard. The display terminal indicator may precede a comparable indicator on the printer by as much as 2 minutes.</p> <p>The Printer Not Working symbol may also appear for a host-initiated print operation. Operators are not instructed to use DEV CNCL, but, if used, the Printer Not Working symbol is replaced with the Time symbol, and the host must continue the operation. Subsequent receipt of outbound FM data will remove the Printer Not Working symbol.</p>
	Printer Busy	<p>The printer assigned to the display station is busy. The operator may either wait for the printer to become available or press the DEV CNCL key. For print requests initiated by the Print key, DEV CNCL will cancel the request, remove the Device Busy symbol, and restore the keyboard.</p> <p>For host-initiated requests, DEV CNCL will cause Device Busy to be replaced by the Wait symbol, and a negative response will be sent to the host. If the Print key was used, it may be possible to select another printer.</p>
	Printer Very Busy	<p>This symbol applies only to operator-initiated requests via the Print key and means the same as Printer Busy except that more time than usual is anticipated before the print request is accepted. It is displayed when the requested printer is allocated to the host as follows:</p> <ol style="list-style-type: none"> 1. If 4 B or 6 B is displayed, the printer is currently "in bracket" with a host PLU. 2. If 4 A or 6 A is displayed, a host Write, Erase/Write, or Copy command has been addressed to the printer, and the print operation has not yet been started by the host (via a command with the Start Print bit on in the WCC).
	Operator Unauthorized	<p>This symbol means that the operator has requested a printer for which the terminal or attached device is not authorized. RESET should be pressed to restore the keyboard.</p> <p>This symbol appears when:</p> <ol style="list-style-type: none"> 1. The Print key is pressed while the Printer Assignment columns of the Operator Information Area show no printer assignment or show question marks.

Figure A-4 (Part 6 of 10). Operator Information Area

Symbol	Name	Explanation
		<ol style="list-style-type: none"> The IDENT key is pressed on a 3278 or a 3279 attached to a 3274 when there is no printer assignment. During a print ID sequence, the operator enters a number which is in the printer authorization matrix, but is not authorized for the display. During a local print operation initiated by the Print key, the "printer" assigned is really a display. This can occur if an invalid device description is loaded into the printer authorization matrix. The print buffer is unable to store the contents of a display buffer (for example when the display buffer is too large) during an operator-initiated local copy operation.
X ←→	Go Elsewhere	<p>An action has been attempted which is invalid for the display screen location. RESET should be pressed and either the cursor should be moved or some other action taken.</p> <p>The Go Elsewhere symbol appears when:</p> <ol style="list-style-type: none"> An attempt has been made to enter, insert, erase, or delete a character when the cursor is in a protected field or at an attribute location. An attempt has been made to use the CURSR SEL key while the cursor is not in a cursor select or selector-light-pen field. An attempt has been made to enter MSR/MHS data outside the operator input area during an SSCP-LU session when the 3274 is configured for the numeric and alphameric character sets.
X >	More Than	This symbol means that the operator has attempted to enter too much information into a field. RESET should be pressed to restore the keyboard, and the operation should be retried and the entry corrected.
X NUM	Numeric	This symbol appears when the Numeric Lock feature is installed. A non-numeric entry was made at a display screen location reserved for numeric information. RESET should be pressed to restore the keyboard, and the operation should be retried.
X #?	What Number	The operator has entered a number which is unacceptable at the display screen location. This message appears when a selected print ID is not numeric or is not in the matrix, or an incorrect entry is made in test mode. (Refer to description of IDENT key in Chapter 3 for further information.) RESET should be pressed to restore the keyboard and to make the correct entry.
X □?	Questionable Card	The operator tried to read an inappropriate magnetic stripe card. RESET should be pressed and the correct MSR card should be used. If a keyboard is not available, repeat the operation using a valid MSR card. This symbol will also appear if the End of Inquiry (EOI) character is present on the magnetic card. Cards with EOI are applicable to the operator identification card reader for the 3275 and 3277 only.

Figure A-4 (Part 7 of 10). Operator Information Area

H1, P-7/10

Symbol	Name	Explanation
X ʹ+? X ˘+? X ˆ+? X ˙+? X ˚+?	Accent Plus What	These messages indicate that an invalid dead key/character key combination was entered (Canadian French keyboard only). RESET should be pressed to restore the keyboard, and a valid dead key/character key combination should be entered. Valid combinations are as follows: ` à Á è É ù Û ´ é Ê ^ â Æ ê Ê î Î ò Ô û Û ¨ ë Ë Ì Ï Ü § § § For further information, refer to "Dead Keys, Canadian French Keyboards" in Chapter 3.
X -S	Minus Symbol	The symbol keyed is not available. The RESET key should be pressed to restore the keyboard.
X □←⊠	Message Received	A message from the system operator (SSCP control program) was received and rejected. RESET should be pressed to restore the keyboard. This symbol appears only on displays attached to a 3276 unit that uses SNA protocol.
Reminders (locations 21 through 27)		
—/— nn —/— nnn	Communication Reminder	The communication link connecting the control unit to the system is producing errors. Refer to Appendix C for a description of the error codes. The Communication Reminder appears when: <ol style="list-style-type: none"> 1. The control unit detects a permanent error condition in the connection to the host. (Attempts to retry have ceased.) In this case, the reminder symbol is sent to all terminals attached to the control unit. 2. In BSC mode, a line error is detected which results in the original contents of the screen being restored and a request for retransmission made to the host. In this case, the reminder symbol is sent only to the affected terminal.
□←⊠	Reserved	This symbol (3276, 3278, or 3279 attached to a 3276 only) is reserved for future use and should be ignored if it is displayed.
Programmed Symbols (locations 31 through 34)		
The symbol set indicators, locations 31 through 33, show the symbol set that will be addressed for a displayable character or symbol in response to the next character entered at the keyboard. A supplementary indicator in location 34 is present if the application program allows the operator to select a PS character attribute for character positions in the current field.		
S0	Base character set	The base character set is addressed for a displayable character when the operator presses a character key.
PSA through PSF	Symbol set A through symbol set F	The EBCDIC code for characters entered at the keyboard will be used to address the indicated symbol set for a displayable character.

Figure A-4 (Part 8 of 10). Operator Information Area

H 7, P-8/10

Symbol	Name	Explanation
Supplementary Indicator:		
None		The operator is not allowed to select a symbol set.
⌘		The current character set or symbol set was selected by the operator.
▶▶		The current character set or symbol set is determined by the extended field attribute [either (1) operator selection is allowed, but no selection has been made, or (2) the operator has selected field inherit].


Shifts and Modes (locations 37 through 41):

Note: Display stations that support the Extended Data Stream feature use locations 36 through 44 for Shifts and Modes and the insert-mode symbol transfers to location 52.

NUM	Numeric	The Numeric Lock feature is installed and the keyboard is in numeric shift, which allows use of the 0 through 9 keys, and the decimal sign, minus (-), and DUP keys only.
⇧	Upshift	The keyboard is in upshift.
^	Insert	The keyboard is in insert mode. A character may be inserted at the cursor location. Characters beyond the cursor position move to make room for the inserted character.
APL		The keyboard is in APL mode.
TEXT		The keyboard is in TEXT mode.

Extended Highlighting (locations 46 and 47)

The Extended Highlighting indicator in location 46 shows how the next character entered at the keyboard will be highlighted on the display screen—any symbol in location 46 confirms that the operator is allowed to select an extended highlighting character attribute for character positions in the current field. A supplementary indicator in location 47 is present when the application program allows the operator to select an extended highlighting character attribute.

None		No extended highlighting.
a	Reverse Video	Character highlighting by reversing the light intensity between the character and its background.
	Blink	Character highlighting by blinking on and off at regular intervals.
<u>a</u>	Underscore	Character highlighting by underscore.
Supplementary Indicator		
▶▶		The current character set or symbol set is determined by the extended field attribute [either (1) operator selection is allowed, but no selection has been made, or (2) the operator has selected field inherit].

Extended Color (locations 49 and 50)

The color indicator in location 49 shows the color that will be used to display the next character entered at the keyboard—any indication in location 49 confirms that the operator is allowed to select an extended color character attribute for character positions in the current field. A supplementary indicator in location 50 is present when the application program allows the operator to select an extended color character attribute.

■	Extended color	The color of the symbol is the color that will be used to display the next character at the keyboard.
0	Default	The color is green or white by default.

Figure A-4 (Part 9 of 10). Operator Information Area

H1, P-9/10

Symbol	Name	Explanation
Supplementary Indicator		
None		The operator is not allowed to select extended color.
⚡		The current extended color attribute was selected by the operator.
▶▶		The current extended color is determined by the extended field attribute [either (1) operator selection is allowed, but no selection has been made, or (2) the operator has selected field inherit].
Printer Status (locations 60 through 64)		
□-□nn	Printer Assignment	The display station is authorized to use printer address number nn. Individual printers may be assigned address numbers 1 through 7 when attached to the 3276 and 1 through 31 when attached to the 3274. Valid print classes are designated 70 through 85 for the 3274.
□-□??	What Printer	The printer IDENT has changed. Pressing the IDENT key causes display of a new printer assignment.
□-■nn	Printer Printing	The printer identified by nn is printing information from the display station.
□-■nn	Printer Failure	The printer identified by nn has stopped while printing information from the display station. This symbol will remain on until: <ul style="list-style-type: none"> 1. The condition is cleared following operator intervention. 2. The operator uses DEV CNCL following a printer-not-functional condition. 3. Receipt of outbound FM data. 4. Printer assignment is changed because power is applied to another printer (3276 default printer authorization matrix).
□-□__	Assign Printer	When the operator changes the assigned printer using the IDENT key, the two numbers appear in the assignment columns, replacing the underlines.
(nothing displayed)		If a display is attached to a 3274 (4 displayed in location 1), printing cannot take place. If the display is attached to a 3276 (6 displayed in location 1), there is no automatic printer authorization. The operator may be able to assign a printer using the IDENT key.

Figure A-4 (Part 10 of 10). Operator Information Area

H 1, P. 10 / 10

TEX

Exhibit I1

	0	1	2	3	4	5	6	7
'000	()	[]	[]	[]
'010	{	}	<	>	|	||	/	undefined
'020	()	()	[]	[]
'030	[	]	{	}	<	>	/	undefined
'040	()	[]	[]	[]
'050	{	}	<	>	/	undefined	undefined	undefined
'060	(	)	[	]	[	]	|	|
'070	(	)	(	)	{	}	.	undefined
'100	(	)	|	|	undefined	undefined	□	□
'110	∫	∫	⊙	⊙	⊕	⊕	⊗	⊗
'120	Σ	Π	∫	∫	∩	⊕	∧	∨
'130	Σ	Π	∫	∫	∩	⊕	∧	∨
'140	undefined	undefined	undefined	undefined	undefined	undefined	undefined	undefined
'150	undefined	undefined	undefined	undefined	undefined	undefined	undefined	undefined
'160	√	√	√	√	√	|	Γ	undefined
'170	▶	↗	-	-	-	-	undefined	undefined

Symbol Encoding

16 17 18 19 20 21 22 23 24 25

16 17 18 19 20 21 22 23 24 25

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0			¹	0	≡	Π	⁴	π				°	κ	<	◊	
1			!	1	A	Θ	α	θ			Υ	±	∑	∇	<	>
2			∇	2	B	P	β	ρ			'	"	ℜ	®	®	∫
3			#	3	X	Σ	χ	σ			≤	≥	∅	©	©	∫
4			Ξ	4	Δ	T	δ	τ			/ ⁶	×	⊗	™	™	|
5			%	5	E	Υ	ε	υ			∞	∞	⊕	Π	Σ	J
6			&	6	Φ	ς	φ	ϖ			f	∂	∅	√	()
7			∃	7	Γ	Ω	γ	ω			♣	•	∩	·	|	|
8			(	8	H	Ξ	η	ξ			♦	÷	∪	¬	()
9			)	9	I	Ψ	ι	ψ			♥	≠	⊃	^	Γ	Γ
10			* ²	:	∅	Z	φ	ζ			♠	≡	⊇	∨	|	|
11			+	;	K	[	κ	{			↔	≈	∅	↔	L	J
12			,	<	Λ	∴	λ	|			←	...	⊂	←	∫	∫
13			- ³	=	M	]	μ	}			↑	|⁷	⊆	↑	{	}
14			.	>	N	⊥	v	~ ⁵			→	— ⁸	∈	⇒	∫	∫
15			/	?	O	_	o				↓	∟	∉	↓	|⁹	

- Control character
- Not assigned

¹Space or blank.
²Asterisk at height of math operator.
³Minus.
⁴Extension for radical.
⁵Approximately equal to, similar to.
⁶Fraction (shallower than slash).
⁷Extension for upward/downward arrow.
⁸Extension for leftward/rightward arrow.
⁹Extension for left/right brace.

Apple
 Exhibit J1
 P. 1/2

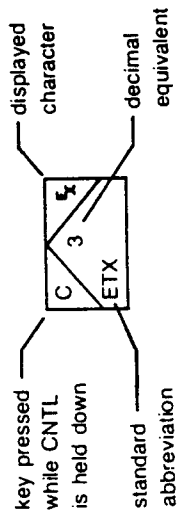
Graphic	Description	Code Name	Octal Code
∫	Extensible integral: top	integraltp	363
|	Extension for integral	integralext	364
∫	Extensible integral: bottom	integralbt	365
)	Extensible right parenthesis: top	parenrighttp	366
|	Extension for right parenthesis	parenrightext	367
)	Extensible right parenthesis: bottom	parenrightbt	370
]	Extensible right bracket: top (ceiling)	bracketrighttp	371
|	Extension for right bracket	bracketrightext	372
]	Extensible right bracket: bottom (floor)	bracketrightbt	373
}	Extensible right brace: top	bracerighttp	374
}	Extensible right brace: middle	bracerightmid	375
}	Extensible right brace: bottom	bracerightbt	376

J1, 2/2

HP Exhibit K1

- ACKNOWLEDGE
- BELL
- BACKSPACE
- CANCEL LINE
- CARRIAGE RETURN
- DATA LINK ESCAPE
- DEVICE CONTROL 1
- DEVICE CONTROL 2
- DEVICE CONTROL 3
- DEVICE CONTROL 4
- DELETE
- END OF MEDIUM
- ENQUIRY
- END OF TRANSMISSION
- ESCAPE
- END OF BLOCK
- END OF TEXT
- FORM FEED
- FILE SEPARATOR
- GROUP SEPARATOR
- HORIZONTAL TAB
- LINE FEED
- NEGATIVE ACKNOWLEDGE
- RECORD SEPARATOR
- SHIFT IN
- SHIFT OUT
- SPACE
- START OF HEADING
- START OF TEXT
- SUBSTITUTE
- SYNCHRONOUS IDLE
- UNIT SEPARATOR
- VERTICAL TAB

Control Character Legend:



B ₈ = 1															
EXTENDED ROMAN CHARACTERS															
0	0	0	0	0	1	1	1	0	0	0	1	1	0	1	1
0	0	0	1	1	0	0	1	0	0	1	0	0	1	0	1
0	0	1	0	1	-	-	A	À							
					e	é	ì	í							
					o	ó	ø								
					u	ú	A	Æ							
					a	á	a	â							
					c	ç	e	é	ì	í					
					N	Ñ	o	ó	o	ø					
					n	ñ	u	ú	a	æ					
					,		!	¡	à	ä	ÿ				
					?		e	è	e	í	ì				
					#		o	ò	o	ö					
					#		u	ù	u	ü					
					~		a	ä	e	é					
					SP		e	ë	ì	í					
					#		o	ö	s	ß					
					#		u	ü							
					#		u	ü							

CONTROL (CNTRL) CHARACTERS		DISPLAYABLE CHARACTERS													
BIT 7 4321	BIT 6 3210	0	1	DL	DL	0	1	0	1	0	1	0	1	0	1
0000	@	NUL	P	16	DL	SP	0	@	P	'	P	'	p	P	p
0001	A	1	S _H	17	D ₁	|	1	A	o	a	q				
0010	B	2	S _X	18	D ₂	"	2	B	R	b	r				
0011	C	3	E _X	19	D ₃	#	3	C	S	c	s				
0100	D	4	E _T	20	D ₄	\$	4	D	T	d	t				
0101	E	5	E _O	21	N _k	%	5	E	U	e	u				
0110	F	6	A _K	22	S _y	&	6	F	V	f	v				
0111	G	7	Δ	23	E _B	'	7	G	W	w	w				
1000	H	8	B _S	24	C _N	(	8	H	X	x	x				
1001	I	9	H _T	25	E _M	)	9	I	Y	y	y				
1010	J	10	L _F	26	S _B	*	:	J	Z	z	z				
1011	K	11	V _T	27	F _C	+	:	K	|	k	{				
1100	L	12	F _F	28	F _S	,	<	L	|	|	;				
1101	M	13	C _R	29	G _S	-	=	M	|	|	~				
1110	N	14	S _O	30	R _S	.	>	N	^	^	~				
1111	O	15	S _I	31	U _S	/	?	O	_	_	DEL				

L 1, P-2/2

Graphic Symbols (cont'd.)

KEY (OCTAL) [DECIMAL]	SYMBOL	KEY (OCTAL) [DECIMAL]	SYMBOL	KEY (OCTAL) [DECIMAL]	SYMBOL
r (162) [114]	***** ***** ***** ***** ***** **** *** ** † *	w (167) [119]	* *	i (174) [124]	: ** : ** : ** : ** : ** : ** : ** : ** : ** : ** : ** : **
s (163) [115]	***** ***** ** ** ** **	x (170) [120]	* *	} (175) [125]	: ** : ** : ** : ** : ** : ** : ** : ** : ** : ** : **
t (164) [116]	** ** ** ** ***** ***** ** ** ** **	y (171) [121]	* *	~ (176) [126]	***** ***** ***** ***** *** ** **
u (185) [117]	** ** ** ** ***** *****	z (172) [122]	***** *****		
v (166) [118]	** ** ** ** ***** ***** ** ** ** **	{ (173) [123]	***** *****		

APPENDIX F ASCII, SUPPLEMENTAL AND SPECIAL CHARACTER SETS

Supple- mental (Bit 7 High)	ASCII (Bit 7 Low)	Special	Binary Code								
			Bit 7 High	Low	6	5	4	3	2	1	0
	SP	SP	1	0	0	1	0	0	0	0	0
i	!	!	1	0	0	1	0	0	0	0	1
¢	"	"	1	0	0	1	0	0	0	1	0
£	#	#	1	0	0	1	0	0	0	1	1
--	\$	\$	1	0	0	1	0	0	1	0	0
¥	%	%	1	0	0	1	0	0	1	0	1
--	&	&	1	0	0	1	0	0	1	1	0
§	'	'	1	0	0	1	0	0	1	1	1
⌘	(	(	1	0	0	1	0	1	0	0	0
©	)	)	1	0	0	1	0	1	0	0	1
Ⓐ	*	*	1	0	0	1	0	1	0	1	0
“	+	+	1	0	0	1	0	1	0	1	1
--	,	,	1	0	0	1	0	1	1	0	0
--	-	-	1	0	0	1	0	1	1	0	1
--	.	.	1	0	0	1	0	1	1	1	0
--	/	/	1	0	0	1	0	1	1	1	1
°	0	0	1	0	0	1	1	0	0	0	0
±	1	1	1	0	0	1	1	0	0	0	1
²	2	2	1	0	0	1	1	0	0	1	0
³	3	3	1	0	0	1	1	0	0	1	1
--	4	4	1	0	0	1	1	0	1	0	0
μ	5	5	1	0	0	1	1	0	1	0	1
¶	6	6	1	0	0	1	1	0	1	1	0
·	7	7	1	0	0	1	1	0	1	1	1

M1, P-2/4

Supple- mental (Bit 7 High)	ASCII (Bit 7 Low)	Special	Binary Code								
			Bit 7 High	Low	6	5	4	3	2	1	0
--	8	8	1	0	0	1	1	1	0	0	0
1	9	9	1	0	0	1	1	1	0	0	1
0	:	:	1	0	0	1	1	1	0	1	0
"	;	;	1	0	0	1	1	1	0	1	1
¼	<	<	1	0	0	1	1	1	1	0	0
½	=	=	1	0	0	1	1	1	1	0	1
--	>	>	1	0	0	1	1	1	1	1	0
¿	?	?	1	0	0	1	1	1	1	1	1
À	@	@	1	0	1	0	0	0	0	0	0
Á	A	A	1	0	1	0	0	0	0	0	1
Â	B	B	1	0	1	0	0	0	0	1	0
Ã	C	C	1	0	1	0	0	0	0	1	1
Ä	D	D	1	0	1	0	0	0	1	0	0
Å	E	E	1	0	1	0	0	0	1	0	1
Æ	F	F	1	0	1	0	0	0	1	1	0
Ç	G	G	1	0	1	0	0	0	1	1	1
È	H	H	1	0	1	0	0	1	0	0	0
É	I	I	1	0	1	0	0	1	0	0	1
Ê	J	J	1	0	1	0	0	1	0	1	0
Ë	K	K	1	0	1	0	0	1	0	1	1
Ì	L	L	1	0	1	0	0	1	1	0	0
Í	M	M	1	0	1	0	0	1	1	0	1
Î	N	N	1	0	1	0	0	1	1	1	0
Ï	O	O	1	0	1	0	0	1	1	1	1
--	P	P	1	0	1	0	1	0	0	0	0

Supple-
mental
(Bit 7
High)

ASCII Special
(Bit 7 Low)

Binary Code
Bit 7
High Low 6 5 4 3 2 1 0

Supple- mental (Bit 7 High)	ASCII (Bit 7 Low)	Special (Bit 7 Low)	Bit 7 High	Bit 7 Low	6	5	4	3	2	1	0
Ñ	Q	Q	1	0	1	0	1	0	0	0	1
Ò	R	R	1	0	1	0	1	0	0	1	0
Ó	S	S	1	0	1	0	1	0	0	1	1
Ô	T	T	1	0	1	0	1	0	1	0	0
Õ	U	U	1	0	1	0	1	0	1	0	1
Ö	V	V	1	0	1	0	1	0	1	1	0
Œ	W	W	1	0	1	0	1	0	1	1	1
Ø	X	X	1	0	1	0	1	1	0	0	0
Ù	Y	Y	1	0	1	0	1	1	0	0	1
Ú	Z	Z	1	0	1	0	1	1	0	1	0
Û	[	[	1	0	1	0	1	1	0	1	1
Ü	\	\	1	0	1	0	1	1	1	0	0
ÿ	]	]	1	0	1	0	1	1	1	0	1
--	^	^	1	0	1	0	1	1	1	1	0
β	—	(blank)	1	0	1	0	1	1	1	1	1
à	(underline)		1	0	1	1	0	0	0	0	0
á	(grave)	◇	1	0	1	1	0	0	0	0	1
â	a	⌘	1	0	1	1	0	0	0	1	0
ã	b	⌘	1	0	1	1	0	0	0	1	1
ä	c	⌘	1	0	1	1	0	0	1	0	0
å	d	⌘	1	0	1	1	0	0	1	0	1
æ	e	⌘	1	0	1	1	0	0	1	1	0
ç	f	⌘	1	0	1	1	0	0	1	1	1
è	g	⌘	1	0	1	1	0	1	0	0	0
	h	⌘	1	0	1	1	0	1	0	0	0

M1, P. 4/4

Supple- mental (Bit 7 High)	ASCII (Bit 7 Low)	Special	Binary Code								
			Bit 7 High	Low	6	5	4	3	2	1	0
é	i	¶	1	0	1	1	0	1	0	0	1
ê	j	⌋	1	0	1	1	0	1	0	1	0
ë	k	⌋	1	0	1	1	0	1	0	1	1
ì	l	⌈	1	0	1	1	0	1	1	0	0
í	m	⌋	1	0	1	1	0	1	1	0	1
î	n	+	1	0	1	1	0	1	1	1	0
ï	o	-	1	0	1	1	0	1	1	1	1
--	p	-	1	0	1	1	1	0	0	0	0
ñ	q	-	1	0	1	1	1	0	0	0	1
ò	r	-	1	0	1	1	1	0	0	1	0
ó	s	-	1	0	1	1	1	0	0	1	1
ô	t	†	1	0	1	1	1	0	1	0	0
õ	u	†	1	0	1	1	1	0	1	0	1
ö	v	⌋	1	0	1	1	1	0	1	1	0
œ	w	⌋	1	0	1	1	1	0	1	1	1
ø	x	|	1	0	1	1	1	1	0	0	0
ù	y	≅	1	0	1	1	1	1	0	0	1
ú	z	≅	1	0	1	1	1	1	0	1	0
û	{	π	1	0	1	1	1	1	0	1	1
ü	|	≠	1	0	1	1	1	1	1	0	0
ÿ	}	£	1	0	1	1	1	1	1	0	1
--	~	•	1	0	1	1	1	1	1	1	0
	DEL	DEL	1	1	1	1	1	1	1	1	1

HEX key displays all data in hexadecimal, while CONTROL-HEX displays only protocol control characters for the selected code in hexadecimal.

STEP NO. The number of the current step (Wait for condition) of the Interactive Test (PROG 7 menu, INTERVIEW 40A only).

RUN restarts the trigger program, as well as the Interactive Test, resets the counter and timer, and resets the CRT data buffer.

RUN
(cont.)

```

ASCII/7/ODD/SYNC/11 STEP=0
COUNTER=00000 TIMER=00000
40C002404525C424C002C4C26338363
4520F6520F350F19904F7001234567
3630000005C425044C2C545C2445240C00
0F4520F350F19904F70012345670002
2404525C424C002C4C263383636300
0F4520F350F19904F70012345670002
F05C425044C2C545C2445240C0024045
F243501593E023F7E06F30456739300
25C424C002C4C263383636300000000
04350C1A904F700123456739300000000
2445240C002404525C424C002C4C2633
06F304500300F6520F350F19904F70012
636633830000F05C425044C2C545C24452
24456739300000243501593E023F7E06F30

```

Exhibit NA