

OMNIDIRECTIONAL LASER SCANNER

SPECIFICATION

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1. General Programming codes

Code	Description	Page	EAN13 contents
1.1	Open and close (with update) programming mode	13	8712345100001
1.2	Exit programming mode (no update)	13	8712345100094
1.3	Return to default settings	13	8712345100087
1.4	Return to customer default	13	8712345100070
1.6	Defaults,no protocol	13	8712345110802
1.7	Defaults,RTS/CTS	13	8712345110819

2. Led / Beep / Sleep mode codes

Code	Description	Page	EAN13 contents
2.1.1	Speaker frequency	14	8712345150013
2.1.2	Speaker volume	14	8712345150006
2.2.1	Sleep mode Off	14	8712345130305
2.2.2	Sleep mode after 10 minutes	14	8712345130314
2.2.3	Sleep mode after 30 minutes	14	8712345130329
2.2.4	Sleep mode after 60 minutes	14	8712345130336
2.2.5	Sleep mode after 15 seconds (Test purposes only)	14	8712345130343
2.2.6	Sleep mode after 30 seconds (Test purposes only)	14	8712345130350

3. Same code delay-, Blank- & Sample time codes

Code	Description	Page	EAN13 contents
2.3.1	Same code delay 50 msec	15	8712345130107
2.3.2	Same code delay 100 msec	15	8712345130114
2.3.3	Same code delay 200 msec	15	8712345130121
2.3.4	Same code delay 300 msec	15	8712345130138
2.3.5	Same code delay 400 msec	15	8712345130145
2.3.6	Same code delay 500 msec	15	8712345130152
2.3.7	Same code delay 600 msec	15	8712345130169
2.3.8	Same code delay 700 msec	15	8712345130176
2.3.9	Same code delay 800 msec	16	8712345130183
2.3.10	Same code delay 1000 msec	16	8712345130190
2.3.15	Code sample period 50 msec	16	8712345130008
2.3.16	Code sample period 100 msec	16	8712345130015
2.3.17	Code sample period 150 msec	16	8712345130022
2.3.18	Code sample period 200 msec	16	8712345130039
2.3.19	Blank time 0 msec (Demo purposes only)	16	8712345130206

Code	Description	Page	EAN13 contents
2.3.20	Blank time 50 msec	16	8712345130213
2.3.21	Blank time 100 msec	17	8712345130220
2.3.22	Blank time 150 msec	17	8712345130237
2.3.23	Blank time 200 msec	17	8712345130244

4. Interfaces & their settings

Code	Description	Page	EAN13 contents
3.1.15	RS-232 select 7 databits	18	8712345110307
3.1.16	RS-232 select 8 databits	18	8712345110314
3.1.20	1 Stopbit	18	8712345110208
3.1.21	2 Stop bits	18	8712345110215
3.1.25	RTS/CTS On (half duplex)	18	8712345110536
3.1.26	RTS/CTS Off	18	8712345110529

Code	Description	Page	EAN13 contents
3.1.1	Baudrate 300	19	8712345110000
3.1.2	Baudrate 1200	19	8712345110017
3.1.3	Baudrate 2400	19	8712345110024
3.1.4	Baudrate 4800	19	8712345110031
3.1.5	Baudrate 9600	19	8712345110048
3.1.6	Baudrate 19200	19	8712345110055
3.1.7	Baudrate 38400	19	8712345110062
3.1.8	Baudrate 600	19	8712345110079

Code	Description	Page	EAN13 contents
3.1.10	Parity None	20	8712345110109
3.1.11	Parity Even	20	8712345110116
3.1.12	Parity Odd	20	8712345110123
3.1.13	Parity Mark	20	8712345110130
3.1.14	Parity Space	20	8712345110147

Code	Description	Page	EAN13 contents
3.4.1	Keyboard wedge terminal type XT	21	8712345400002
3.4.2	Keyboard wedge terminal type AT	21	8712345400019
3.4.3	Keyboard wedge terminal type PS2	21	8712345400026
3.4.10	Keyboard wedge International Keyboard (ALT)	21	8712345400200
3.4.11	Keyboard wedge language = US	21	8712345400217
3.4.13	Keyboard wedge language = French	21	8712345400231
3.4.14	Keyboard wedge language = German	21	8712345400248
3.4.30	Keyboard wedge CapsLock switched Off	22	8712345400507
3.4.31	Keyboard wedge CapsLock switched On	22	8712345400514
3.4.32	Keyboard wedge leading zero's Off at Alt method	22	8712345400521
3.4.33	Keyboard wedge leading zero's On at Alt method	22	8712345400538

Code	Description	Page	EAN13 contents
3.4.35	KBW intercharacter delay 0 msec	23	8712345130404
3.4.36	KBW intercharacter delay 1 msec	23	8712345130411
3.4.37	KBW intercharacter delay 2 msec	23	8712345130428
3.4.38	KBW intercharacter delay 5 msec	23	8712345130435
3.4.39	KBW intercharacter delay 10 msec	23	8712345130442
3.4.40	KBW intercharacter delay 20 msec	23	8712345130459
3.4.41	KBW intercharacter delay 50 msec	23	8712345130466
3.4.42	KBW intercharacter delay 100 msec	23	8712345130473
3.4.43	KBW intercharacter delay 200 msec	24	8712345130480
3.4.44	KBW intercharacter delay 500 msec	24	8712345130497

Code	Description	Page	EAN13 contents
3.5.1	USB keyboard Emulation	25	8712345350000
3.5.2	USB IBM fixed POS scanner	25	8712345350024
3.5.3	USB IBM handheld scanner emulation	25	8712345350031
3.5.4	USB Comport emulation	25	8712345350017

4. Interfaces & their settings

Code	Description	Page	EAN13 contents
3.5.5	Enable DTR Check (USB comport emulation only)	26	8712345110956
3.5.6	Disable DTR Check (USB comport emulation only)	26	8712345110963
3.5.7	Enable RTS check (USB comport emulation only)	26	8712345110642
3.5.8	Disable RTS check (USB comport emulation only)	26	8712345110529

Code	Description	Page	EAN13 contents
3.2.8	Interface (OCIA) time out ON	27	8712345130602
3.2.9	Interface (OCIA) time out OFF	27	8712345130619

5. Interface Preset codes

Code	Description	Page	EAN13 contents
3.1.30	RS-232 Preset 1 Wincor Nixdorf Beetle Mode A1	28	8712345190101
3.1.31	RS-232 Preset 2 Wincor Nixdorf Beetle Mode A2	28	8712345190118
3.1.32	RS-232 Preset 3 Wincor Nixdorf Beetle Mode B1	28	8712345190125
3.1.33	RS-232 Preset 4 Wincor Nixdorf Beetle Mode B2	28	8712345190132
3.1.34	RS-232 Preset 5 Wincor Nixdorf Beetle Mode B3	28	8712345190149
3.1.35	RS-232 Preset 6 Fujitsu-ICL Mode	28	8712345200008
3.1.36	RS-232 Preset 7 Fortronic Mode	28	8712345200107
3.2.4	OCIA Preset 1	28	8712345120443
3.2.5	OCIA Preset 2	29	8712345120450
3.2.6	OCIA Preset 3	29	8712345120467
3.2.7	OCIA Preset 4	29	8712345120474
3.2.1	OCIA byte format EAN/UPC DTS, Indu Scantech	29	8712345120412
3.2.2	OCIA byte format EAN/UPC NCR short, no Indu	29	8712345120429
3.2.3	OCIA byte format EAN/UPC/Indu NCR long	29	8712345120436
3.3.1	IBM Point Of Sale scanner	29	8712345170004
3.3.2	IBM Handscanner emulation	29	8712345170011

6. Decoding parameters

Code	Description	Page	EAN13 contents
4.1.1	EAN/UPC (AddOn Off) On	30	8712345141011
4.1.2	EAN/UPC (AddOn Off) OFF	30	8712345141004
4.1.3	EAN/UPC + AddOn	30	8712345141028
4.1.4	EAN/UPC + AddOn mandatory	30	8712345141042
4.1.5	EAN/UPC + AddOn mand. for 379/434/439/529/977, opt.for others	30	8712345141035
4.1.6	EAN/UPC + AddOn mand. for 379/434/439/529/977, not for others	30	8712345141073
4.1.7	AddOn5 only on (AddOns must be selected)	30	8712345141059
4.1.8	AddOn5 only Off (AddOns must be selected)	30	8712345141066
4.1.9	Verification of the Price check digit : Off (EAN13)	31	8712345110765
4.1.10	Price checkdigit verify, 4 digits price field (EAN13/UPCA)	31	8712345110789
4.1.11	Price checkdigit verify, 5 digits price field (EAN13/UPCA)	31	8712345110772
4.1.20	Code 128/EAN 128 On	31	8712345143107
4.1.21	Code 128/EAN 128 Off	31	8712345143114
4.1.25	Code 39 On	31	8712345143015
4.1.26	Code 39 full ascii On	31	8712345143046
4.1.27	Code 32 On	31	8712345143039
4.1.28	Code 39/Code 32 Off	32	8712345143053
4.1.30	Codabar On	32	8712345143022
4.1.31	Codabar Off	32	8712345143060
4.1.35	Interleaved 2/5 On	32	8712345142025
4.1.36	Interleaved 2/5 Off	32	8712345142001

6. Decoding parameters

Code	Description	Page	EAN13 contents
4.2.1	Setting minimum length Code 128	34	8712345144135
4.2.2	Setting minimum length Code 39	34	8712345144142
4.2.3	Setting minimum length Codabar	34	8712345144159
4.2.4	Setting minimum length Interleaved 2/5 (recommended)	34	8712345144111
4.2.32	Setting minimum length MSI Plessey	34	8712345144166
4.2.33	Setting minimum length Code 93	34	8712345144173

Code	Description	Page	EAN13 contents
4.2.5	Set fixed length 1 Code 128	35	8712345144319
4.2.6	Set fixed length 1 Code 39	35	8712345144326
4.2.7	Set fixed length 1 Codabar	35	8712345144333
4.2.8	Set fixed length 1 Interleaved 2/5	35	8712345144302
4.2.9	Set fixed length 2 Code 128	35	8712345144357
4.2.10	Set fixed length 2 Code 39	35	8712345144364
4.2.11	Set fixed length 2 Codabar	35	8712345144371
4.2.12	Set fixed length 2 Interleaved 2/5	35	8712345144340
4.2.34	Set fixed length 1 MSI Plessey	36	8712345144383
4.2.35	Set fixed length 2 MSI Plessey	36	8712345144395
4.2.36	Set fixed length 1 Code 93	36	8712345144401
4.2.37	Set fixed length 2 Code 93	36	8712345144418

Code	Description	Page	EAN13 contents
4.2.14	Length = 2 (Not recommended)	37	8712345131029
4.2.15	Length = 4	37	8712345131043
4.2.16	Length = 6	37	8712345131067
4.2.17	Length = 8	37	8712345131081
4.2.18	Length = 10	37	8712345131104
4.2.19	Length = 12	37	8712345131128
4.2.20	Length = 14	37	8712345131142
4.2.21	Length = 16	37	8712345131166
4.2.22	Length = 18	38	8712345131180
4.2.23	Length = 20	38	8712345131203
4.2.24	Length = 22	38	8712345131227
4.2.25	Length = 24	38	8712345131241
4.2.26	Length = 26	38	8712345131265
4.2.27	Length = 28	38	8712345131289
4.2.28	Length = 30	38	8712345131302
4.2.29	Length = 32	38	8712345131326

Code	Description	Page	EAN13 contents
4.3.1	Count = 1	39	8712345131012
4.3.2	Count = 2	39	8712345131029
4.3.3	Count = 3	39	8712345131036
4.3.4	Count = 4	39	8712345131043

6. Decoding parameters

Code	Description	Page	EAN13 contents
5.4.1	AddOn format with separator	40	8712345110499
5.4.2	AddOn format without separator	40	8712345110482

Code	Description	Page	EAN13 contents
5.8.22	Do not transmit start/stop Code 39	41	8712345145705
5.8.23	Transmit start/stop Code 39	41	8712345145712
5.8.24	Do not transmit start/stop Codabar	41	8712345145729
5.8.25	Transmit start/stop uppercase Codabar	41	8712345145736
5.8.26	Transmit start/stop lowercase Codabar	41	8712345145743

7. Code Representation

Code	Description	Page	EAN13 contents
5.4.3	UPCA format transmitted as UPCA (12 digits)	42	8712345110567
5.4.4	UPCA format transmitted as EAN13 (with leading zero)	42	8712345110574
5.4.5	UPCE format UPCE to UPCA expansion On	42	8712345110550
5.4.6	UPCE format UPCE to UPCA expansion Off	42	8712345110543
5.4.7	UPCE format with leading zero	42	8712345110437
5.4.8	UPCE format without leading zero	42	8712345110420
5.4.9	UPCE format with check digit	42	8712345110451
5.4.10	UPCE format without check digit	42	8712345110444
5.4.15	EAN 128 send FNC1 as J1	43	8712345143121
5.4.16	EAN 128 do not send FNC1 as J1	43	8712345143138

Code	Description	Page	EAN13 contents
5.4.20	Transmit printable characters only	44	8712345143305
5.4.21	Transmit printable and non-printable characters	44	8712345143312
5.4.22	Transmit code length at non EAN codes Off	44	8712345110703
5.4.23	Transmit code length at non EAN codes On	44	8712345110710
5.4.24	Transmit EAN8 checkdigit On	44	8712345110826
5.4.25	Transmit EAN8 checkdigit Off	44	8712345110833
5.4.26	Transmit EAN13 checkdigit On	44	8712345110840
5.4.27	Transmit EAN13 checkdigit Off	44	8712345110857
5.4.28	Transmit UPCA checkdigit On	45	8712345110864
5.4.29	Transmit UPCA checkdigit Off	45	8712345110871
5.4.30	Expand EAN8 to UPCA On	45	8712345110888
5.4.31	Expand EAN8 to UPCA Off	45	8712345110895
5.4.32	Transmit first digit UPCA Off	45	8712345110901
5.4.33	Transmit first digit UPCA On	45	8712345110918
5.4.34	Transmission of the Check Character at Code 39 : OFF	46	8712345146009
5.4.35	Transmission of the Check Character at Code 39 : ON	46	8712345146016
5.4.36	Verification of the Check Character at Code 39 : OFF	46	8712345146023
5.4.37	Verification of the Check Character at Code 39 : ON	46	8712345146030
5.4.38	Transmission of the Check Character at Codabar : OFF	46	8712345146047
5.4.39	Transmission of the Check Character at Codabar : ON	46	8712345146054
5.4.40	Verification of the Check Character at Codabar : OFF	46	8712345146061
5.4.41	Verification of the Check Character at Codabar : ON	46	8712345146078
5.4.42	Transmission of the Check Digit at Interleaved 2/5 : OFF	47	8712345146085
5.4.43	Transmission of the Check Digit at Interleaved 2/5 : ON	47	8712345146092
5.4.44	Verification of the Check Digit at Interleaved 2/5 : OFF	47	8712345146108
5.4.45	Verification of the Check Digit at Interleaved 2/5 : ON	47	8712345146115
5.4.46	Verification MSI Plessey Check Digit : OFF	47	8712345142223
5.4.47	Verification modulo 10 MSI Plessey Check Digit	47	8712345142230

7. Code Representation

Code	Description	Page	EAN13 contents
5.4.48	Verification double modulo 10 MSI Plessey Check Digit	47	8712345142247
5.4.49	Verification modulo 11 MSI Plessey Check Digit	47	8712345142254
5.4.50	Verification modulo 10 and 11 MSI Plessey Check Digit	48	8712345142261
5.4.51	Transmission Check Digit MSI Plessey : OFF	48	8712345142278
5.4.52	Transmit one MSI Plessey Check Digit	48	8712345142285
5.4.53	Transmit two MSI Plessey Check Digits	48	8712345142292
5.4.54	Transmission of the Check Digit at ISBN : OFF	48	8712345120528
5.4.55	Transmission of the Check Digit at ISBN : ON	48	8712345120535
5.4.56	Transmission of the Check Digit at ISSN numbers: OFF	48	8712345120566
5.4.57	Transmission of the Check Digit at ISSN numbers: ON	48	8712345120573

8. Data formatting

Code	Description	Page	EAN13 contents
5.1.1	Open/close without update programming mode preambles	49	8712345144203
5.1.2	Exit programming mode preambles with update	49	8712345131005
5.2.1	Postamble = CR	49	8712345110505
5.2.2	Postamble = LF	49	8712345110611
5.2.3	Postamble = CR + LF	49	8712345110512
5.2.4	Postamble = free format	49	8712345110635
5.2.5	Open/close without update programming mode postambles	49	8712345144210
5.2.6	Close programming mode postambles with update	49	8712345131005
5.3.1	Set message format with code identifiers	50	8712345110475
5.3.2	Set message format without code identifiers	50	8712345110468
5.3.10	Setting identifier EAN13	50	8712345144005
5.3.11	Setting identifier EAN8	50	8712345144012
5.3.12	Setting identifier UPCA	50	8712345144029
5.3.13	Setting identifier UPCI	50	8712345144036
5.3.14	Setting identifier EAN 128	50	8712345144043
5.3.15	Setting identifier Code 128	50	8712345144074
5.3.16	Setting identifier Code 39	51	8712345144081
5.3.17	Setting identifier Code 32	51	8712345144067
5.3.18	Setting identifier Codabar	51	8712345144098
5.3.19	Setting identifier Interleaved 2/5	51	8712345144050
5.3.20	Exit programming free programmable identif. with update	51	8712345131005
5.3.21	Exit programming free programmable ident. without update	51	8712345144203
5.3.27	Setting identifier MSI Plessey	51	8712345144500
5.3.28	Setting identifier Code 93	51	8712345144517

9. Controller codes

Code	Description	Page	EAN13 contents
2.6.5	Define control character Enable	52	8712345180010
2.6.6	Define control character Disable	52	8712345180027
2.6.7	Define control character Reset	52	8712345180003
2.6.11	Define control character Beep	52	8712345180041
2.6.12	Define control character Wait (forced to sleepmode)	52	8712345180058
2.6.13	Define control character Active (forced from sleepmode)	52	8712345180065

10. Auxiliary Port codes

<u>Code</u>	<u>Description</u>	<u>Page</u>	<u>EAN13 contents</u>
7.4.10	Handheld scanner connection Off	53	8712345510008
7.4.11	Handheld scanner connection On	53	8712345510015

11. Shuttle SG-15 codes

<u>Code</u>	<u>Description</u>	<u>Page</u>	<u>EAN13 contents</u>
9.1.1	SG-15 macro code (Omni directional only)	54	8712345200152

12. ASCII codes

<u>Code</u>	<u>Description</u>	<u>Page</u>	<u>EAN13 contents</u>
10.1.1	SOH (Similar to 6.1.1)	55	8712345131012
10.1.2	STX (Similar to 6.1.2)	55	8712345131029
10.1.3	ETX (Similar to 6.1.3)	55	8712345131036
10.1.4	EOT (Similar to 6.1.4)	55	8712345131043
10.1.5	ENQ	55	8712345131050
10.1.6	ACK	55	8712345131067
10.1.7	BEL	55	8712345131074
10.1.8	BS	55	8712345131081

12. ASCII codes

Code	Description	Page	EAN13 contents
10.1.9	HT	56	8712345131098
10.1.10	LF	56	8712345131104
10.1.11	VT	56	8712345131111
10.1.12	FF	56	8712345131128
10.1.13	CR	56	8712345131135
10.1.14	SO	56	8712345131142
10.1.15	SI	56	8712345131159
10.1.16	DLE	56	8712345131166
10.1.17	DC1	57	8712345131173
10.1.18	DC2	57	8712345131180
10.1.19	DC3	57	8712345131197
10.1.20	DC4	57	8712345131203
10.1.21	NAK	57	8712345131210
10.1.22	SYN	57	8712345131227
10.1.23	ETB	57	8712345131234
10.1.24	CAN	57	8712345131241
10.1.25	EM	58	8712345131258
10.1.26	SUB	58	8712345131265
10.1.27	ESC	58	8712345131272
10.1.28	FS	58	8712345131289
10.1.30	GS	58	8712345131296
10.1.31	RS	58	8712345131302
10.1.32	US	58	8712345131319
10.1.33	SP	58	8712345131326
10.1.34	!	59	8712345131333
10.1.35	"	59	8712345131340
10.1.36	#	59	8712345131357
10.1.37	\$	59	8712345131364
10.1.38	%	59	8712345131371
10.1.39	&	59	8712345131388
10.1.40	'	59	8712345131395
10.1.41	(59	8712345131401
10.1.42)	60	8712345131418
10.1.43	*	60	8712345131425
10.1.44	+	60	8712345131432
10.1.45	,	60	8712345131449
10.1.46	-	60	8712345131456
10.1.47	.	60	8712345131463
10.1.48	/	60	8712345131470
10.1.49	0	60	8712345131487
10.1.50	1	61	8712345131494
10.1.51	2	61	8712345131500
10.1.52	3	61	8712345131517
10.1.53	4	61	8712345131524
10.1.54	5	61	8712345131531
10.1.55	6	61	8712345131548
10.1.56	7	61	8712345131555
10.1.57	8	61	8712345131562
10.1.58	9	62	8712345131579
10.1.59	:	62	8712345131586
10.1.60	;	62	8712345131593
10.1.61	<	62	8712345131609
10.1.62	=	62	8712345131616

12. ASCII codes

Code	Description	Page	EAN13 contents
10.1.63	>	62	8712345131623
10.1.64	?	62	8712345131630
10.1.65	@	62	8712345131647
10.1.66	A	63	8712345131654
10.1.67	B	63	8712345131661
10.1.68	C	63	8712345131678
10.1.69	D	63	8712345131685
10.1.70	E	63	8712345131692
10.1.71	F	63	8712345131708
10.1.72	G	63	8712345131715
10.1.73	H	63	8712345131722
10.1.74	I	64	8712345131739
10.1.75	J	64	8712345131746
10.1.76	K	64	8712345131753
10.1.77	L	64	8712345131760
10.1.78	M	64	8712345131777
10.1.79	N	64	8712345131784
10.1.80	O	64	8712345131791
10.1.81	P	64	8712345131807
10.1.82	Q	65	8712345131814
10.1.83	R	65	8712345131821
10.1.84	S	65	8712345131828
10.1.85	T	65	8712345131845
10.1.86	U	65	8712345131852
10.1.87	V	65	8712345131869
10.1.88	W	65	8712345131876
10.1.89	X	65	8712345131883
10.1.90	Y	66	8712345131890
10.1.91	Z	66	8712345131906
10.1.92	[66	8712345191313
10.1.93	\	66	8712345131920
10.1.94]	66	8712345131937
10.1.95	^	66	8712345131944
10.1.96	-	66	8712345131951
10.1.97	`	66	8712345131968
10.1.98	a	67	8712345131975
10.1.99	b	67	8712345131982
10.1.100	c	67	8712345131999
10.1.101	d	67	8712345132002
10.1.102	e	67	8712345132019
10.1.103	f	67	8712345132026
10.1.104	g	67	8712345132033
10.1.105	h	67	8712345132040
10.1.106	i	68	8712345132057
10.1.107	j	68	8712345132064
10.1.108	k	68	8712345132071
10.1.109	l	68	8712345132088
10.1.110	m	68	8712345132095
10.1.111	n	68	8712345132101
10.1.112	o	68	8712345132118
10.1.113	p	68	8712345132125
10.1.114	q	69	8712345132132
10.1.115	r	69	8712345132149
10.1.116	s	69	8712345132156



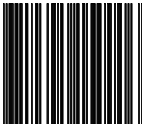





12. ASCII codes









Code	Description	Page	EANI3 contents
10.1.117	t	69	8712345132163
10.1.118	u	69	8712345132170
10.1.119	v	69	8712345132187
10.1.120	w	69	8712345132194
10.1.121	x	69	8712345132200
10.1.122	y	70	8712345132217
10.1.123	z	70	8712345132224
10.1.124	{	70	8712345132231
10.1.125		70	8712345132248
10.1.126	}	70	8712345132255
10.1.127	~	70	8712345132262


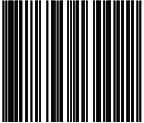


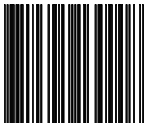



13. Special keys (only for KBW and USB keyboard emulation)

Code	Description	Page	EANI3 contents
11.1.1	F1	71	8712345400606
11.1.2	F2	71	8712345400613
11.1.3	F3	71	8712345400620
11.1.4	F4	71	8712345400637
11.1.5	F5	71	8712345400644
11.1.6	F6	71	8712345400651
11.1.7	F7	71	8712345400668
11.1.8	F8	71	8712345400675
11.1.9	F9	72	8712345400682
11.1.10	F10	72	8712345400699
11.1.11	F11	72	8712345400705
11.1.12	F12	72	8712345400712
11.1.13	Tab	72	8712345400804
11.1.14	Enter (alpha)	72	8712345400811
11.1.15	Enter (numeric)	72	8712345400828
11.1.16	Backspace	72	8712345400835
11.1.17	Delete	73	8712345400842
11.1.18	Esc	73	8712345400859
11.1.19	Arrow left	73	8712345400866
11.1.20	Arrow right	73	8712345400873
11.1.21	Arrow up	73	8712345400880
11.1.22	Arrow down	73	8712345400897
11.1.23	Page up	73	8712345400903
11.1.24	Page down	73	8712345400910
11.1.25	Home	74	8712345400927
11.1.26	End	74	8712345400934

<p>Open and close (with update) programmingmode</p>	
<p style="text-align: center;">  1.1 </p>	
<p>Exit programming mode (no update)</p>	<p style="text-align: center;"> Defaults (no protocol) </p>
<p style="text-align: center;">  1.2 </p>	<p style="text-align: center;">  1.6 </p>
<p>Return to default settings</p>	<p style="text-align: center;"> Defaults RTC/CTS </p>
<p style="text-align: center;">  1.3 </p>	<p style="text-align: center;">  1.7 </p>
<p>Return to customer default</p>	
<p style="text-align: center;">  1.4 </p>	

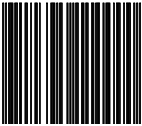
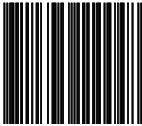
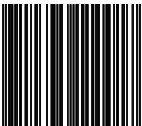

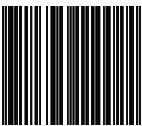

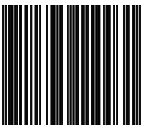

Speaker frequency	Sleep mode after 30 minutes
 2.1.1	 2.2.3
Speaker volume	Sleep mode after 60 minutes
 2.1.2	 2.2.4
Sleep mode Off	Sleep mode after 15 seconds (Test purposes only)
 2.2.1	 2.2.5
Sleep mode after 10 minutes	Sleep mode after 30 seconds (Test purposes only)
 2.2.2	 2.2.6

Same code delay 50 msec	Same code delay 400 msec
 2.3.1	 2.3.5
Same code delay 100 msec	Same code delay 500 msec
 2.3.2	 2.3.6
Same code delay 200 msec	Same code delay 600 msec
 2.3.3	 2.3.7
Same code delay 300 msec	Same code delay 700 msec
 2.3.4	 2.3.8

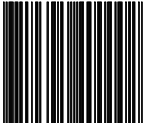

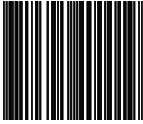

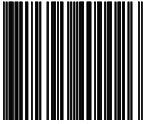
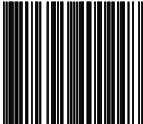
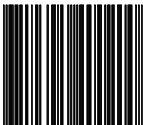
Same code delay 800 msec	Code sample period 150 msec
 2.3.9	 2.3.17
Same code delay 1000 msec	Code sample period 200 msec
 2.4.10	 2.3.18
Code sample period 50 msec	Blank time 0 msec
 2.3.15	 2.3.19
Code sample period 100 msec	Blank time 50 msec
 2.3.16	 2.3.20

Blank time 100 msec	
 2.3.21	
Blank time 150 msec	
 2.3.22	
Blank time 200 msec	
 2.3.23	









RS-232 select 7 databits	RTS/CTS On
 3.1.15	 3.1.25
RS-232 select 8 databits	RTS/CTS Off
 3.1.16	 3.1.26
1 Stopbit	
 3.1.20	
2 Stop bits	
 3.1.21	



Baudrate 300	Baudrate 9600
 3.1.1	 3.1.5
Baudrate 1200	Baudrate 19200
 3.1.2	 3.1.6
Baudrate 2400	Baudrate 38400
 3.1.3	 3.1.7
Baudrate 4800	Baudrate 600
 3.1.4	 3.1.8

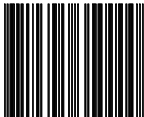


Parity None	Parity Space
 3.1.10	 3.1.14
Parity Even	
 3.1.11	
Parity Odd	
 3.1.12	
Parity Mark	
 3.1.13	

<p>Keyboard wedge terminal type XT</p>	<p>Keyboard wedge language = US</p>
 <p>3.4.1</p>	 <p>3.4.11</p>
<p>Keyboard wedge terminal type AT</p>	<p>Keyboard wedge language = french</p>
 <p>3.4.2</p>	 <p>3.4.13</p>
<p>Keyboard wedge terminal type PS2</p>	<p>Keyboard wedge language = German</p>
 <p>3.4.3</p>	 <p>3.4.14</p>
<p>Keyboard wedge International Keyboard (ALT)</p>	
 <p>3.4.10</p>	

Keyboard wedge CapsLock switched Off	
 3.4.30	
Keyboard wedge CapsLock switched On	
 3.4.31	
Keyboard wedge, leading zero's OFF at Alt method	
 3.4.32	
Keyboard wedge, leading zero's ON at Alt method	
 3.4.33	

KBW intercharacter delay 0 msec	KBW intercharacter delay 10 msec
 3.4.35	 3.4.39
KBW intercharacter delay 1 msec	KBW intercharacter delay 20 msec
 3.4.36	 3.4.40
KBW intercharacter delay 2 msec	KBW intercharacter delay 50 msec
 3.4.37	 3.4.41
KBW intercharacter delay 5 msec	KBW intercharacter delay 100 msec
 3.4.38	 3.4.42

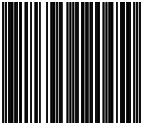
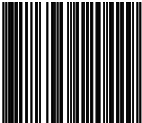

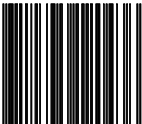




KBW intercharacter delay 200 msec	
 3.4.43	
KBW intercharacter delay 500 msec	
 3.4.44	

USB keyboard emulation	
 3.5.1	
USB IBM fixed POS scanner	
 3.5.2	
USB IBM handheld scanner emulation	
 3.5.3	
USB Comport emulation	
 3.5.4	

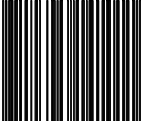

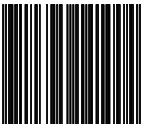


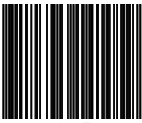
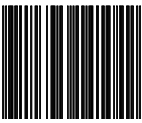

Enable DTR check (USB comport emulation only)	
 3.5.5	
Disable DTR Check (USB comport emulation only)	
 3.5.6	
Enable RTS Check (USB comport emulation only)	
 3.5.7	
Disable RTS Check (USB comport emulation only)	
 3.5.8	


Interface (OCIA) time out ON	
 3.2.8	
Interface (OCIA) time out OFF	
 3.2.9	

RS-232 Preset 1	RS-232 Preset 5
 3.1.30	 3.1.34
RS-232 Preset 2	RS-232 Preset 6
 3.1.31	 3.1.35
RS-232 Preset 3	RS-232 Preset 7
 3.1.32	 3.1.36
RS-232 Preset 4	OCIA preset 1
 3.1.33	 3.2.4

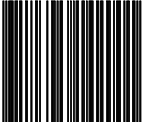


OCIA preset 2	OCIA byte format EAN/UPC NCR short, no Indu
 3.2.5	 3.2.2
OCIA preset 3	OCIA byte format EAN/UPC/Indu NCR long
 3.2.6	 3.2.3
OCIA preset 4	IBM Point Of Sale scanner
 3.2.7	 3.3.1
OCIA byte format EAN/UPC DTS, Indu	IBM Handscanner emulation
 3.2.1	 3.3.2

Decoding Parameters



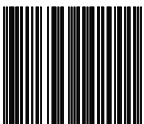



<p style="text-align: center;">EAN/UPC (AddOn Off) On</p>	<p style="text-align: center;">EAN/UPC + AddOn mand. For 379 /434/439/529/977, opt. for others</p>
<div style="text-align: center;">  <p>4.1.1</p> </div>	<div style="text-align: center;">  <p>4.1.5</p> </div>
<p style="text-align: center;">EAN/UPC/AddOn Off</p>	<p style="text-align: center;">EAN/UPC + AddOn mand. for 379 /434/439/529/977, not for others</p>
<div style="text-align: center;">  <p>4.1.2</p> </div>	<div style="text-align: center;">  <p>4.1.6</p> </div>
<p style="text-align: center;">EAN/UPC + AddOn</p>	<p style="text-align: center;">AddOn5 only on (AddOns must be selected)</p>
<div style="text-align: center;">  <p>4.1.3</p> </div>	<div style="text-align: center;">  <p>4.1.7</p> </div>
<p style="text-align: center;">EAN/UPC + AddOn mandatory</p>	<p style="text-align: center;">AddOn5 only Off (AddOns must be selected)</p>
<div style="text-align: center;">  <p>4.1.4</p> </div>	<div style="text-align: center;">  <p>4.1.8</p> </div>




<p>Price check digit verify Off (EAN13)</p>	<p>Code 128/EAN 128 Off</p>
 <p>4.1.9</p>	 <p>4.1.21</p>
<p>Price checkdigit verify, 4 digits price field (EAN13/UPCA)</p>	<p>Code 39 On</p>
 <p>4.1.10</p>	 <p>4.1.25</p>
<p>Price checkdigit verify, 5 digits price field (EAN13/UPCA)</p>	<p>Code 39 full ASCII On</p>
 <p>4.1.11</p>	 <p>4.1.26</p>
<p>Code 128/EAN 128 On</p>	<p>Code 32 On</p>
 <p>4.1.20</p>	 <p>4.1.27</p>

Decoding Parameters

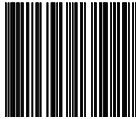
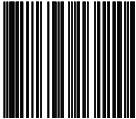

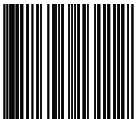




Code 39/Code 32 Off	Interleaved 2/5 Off
 4.1.28	 4.1.36
Codabar On	MSI Plessey On
 4.1.30	 4.1.39
Codabar Off	MSI Plessey Off
 4.1.31	 4.1.40
Interleaved 2/5 On	
 4.1.35	

Code 93 On	ISSN numbers On
 4.1.41	 4.1.45
Code 93 Off	ISSN numbers Off
 4.1.42	 4.1.46
ISBN On	
 4.1.43	
ISBN Off	
 4.1.44	


Setting minimum length Code 128	Setting minimum length MSI Plessey
 4.2.1	 4.2.32
Setting minimum length Code 39	Setting minimum length Code 93
 4.2.2	 4.2.33
Setting minimum length Codabar	
 4.2.3	
Setting minimum length Interleaved 2/5	
 4.2.4	

<p>Set fixed length 1 Code 128</p>	<p>Set fixed length 2 Code 128</p>
 <p>4.2.5</p>	 <p>4.2.9</p>
<p>Set fixed length 1 Code 39</p>	<p>Set fixed length 2 Code 39</p>
 <p>4.2.6</p>	 <p>4.2.10</p>
<p>Set fixed length 1 Codabar</p>	<p>Set fixed length 2 Codabar</p>
 <p>4.2.7</p>	 <p>4.2.11</p>
<p>Set fixed length 1 Interleaved 2/5</p>	<p>Set fixed length 2 Interleaved 2/5</p>
 <p>4.2.8</p>	 <p>4.2.12</p>

Set fixed length 1 MSI Plessey	
 4.2.34	
Set fixed length 2 MSI Plessey	
 4.2.35	
Set fixed length 1 Code 93	
 4.2.36	
Set fixed length 2 Code 93	
 4.2.37	

<p>Length = 2</p>  <p>4.2.14</p>	<p>Length = 10</p>  <p>4.2.18</p>
<p>Length = 4</p>  <p>4.2.15</p>	<p>Length = 12</p>  <p>4.2.19</p>
<p>Length = 6</p>  <p>4.2.16</p>	<p>Length = 14</p>  <p>4.2.20</p>
<p>Length = 8</p>  <p>4.2.17</p>	<p>Length = 16</p>  <p>4.2.21</p>

Decoding Parameters

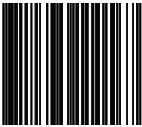
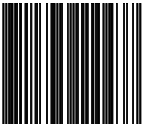

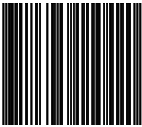
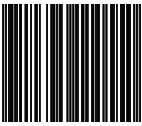
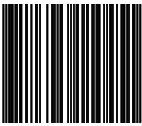


<p>Length = 18</p>  <p>4.2.22</p>	<p>Length = 26</p>  <p>4.2.26</p>
<p>Length = 20</p>  <p>4.2.23</p>	<p>Length = 28</p>  <p>4.2.27</p>
<p>Length = 22</p>  <p>4.2.24</p>	<p>Length = 30</p>  <p>4.2.28</p>
<p>Length = 24</p>  <p>4.2.25</p>	<p>Length = 32</p>  <p>4.2.29</p>


Count = 1	
 4.3.1	
Count = 2	
 4.3.2	
Count = 3	
 4.3.3	
Count = 4	
 4.3.4	




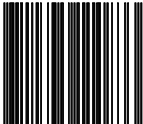
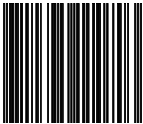

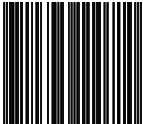

Decoding Parameters







AddOn format without separator	
 5.4.2	
AddOn format with separator	
 5.4.1	

<p>Do not transmit start/stop Code 39</p>	<p>Transmit start/stop lowercase Codabar</p>
<p style="text-align: center;">  5.8.22 </p>	<p style="text-align: center;">  5.8.26 </p>
<p>Transmit start/stop Code 39</p>	
<p style="text-align: center;">  5.8.23 </p>	
<p>Do not transmit start/stop Codabar</p>	
<p style="text-align: center;">  5.8.24 </p>	
<p>Transmit start/stop uppercase Codabar</p>	
<p style="text-align: center;">  5.8.25 </p>	




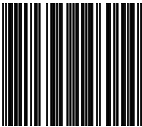




<p>UPCA format transmitted as UPCA (12 digits)</p>	<p>UPCE format with leading zero</p>
 <p>5.4.3</p>	 <p>5.4.7</p>
<p>UPCA format transmitted as EAN13 (with leading zero)</p>	<p>UPCE format without leading zero</p>
 <p>5.4.4</p>	 <p>5.4.8</p>
<p>UPCE format UPCE to UPCA expansion : ON</p>	<p>UPCE format with check digit</p>
 <p>5.4.5</p>	 <p>5.4.9</p>
<p>UPCE format UPCE to UPCA expansion : OFF</p>	<p>UPCE format without check digit</p>
 <p>5.4.6</p>	 <p>5.4.10</p>

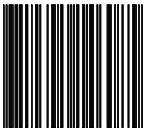







Code 128/EAN 128 send FNC1 as]C1	
 5.4.15	
Code 128/EAN 128 do not send FNC1 as]C1	
 5.4.16	




Transmit printable characters only	Transmit EAN8 checkdigit On
 5.4.20	 5.4.24
Transmit printable and non-printable characters	Transmit EAN8 checkdigit Off
 5.4.21	 5.4.25
Transmit code length at non EAN codes : Off	Transmit EAN13 checkdigit On
 5.4.22	 5.4.26
Transmit code length On	Transmit EAN13 checkdigit Off
 5.4.23	 5.4.27









Transmit UPCA checkdigit On	Transmit first digit UPCA Off
 5.4.28	 5.4.32
Transmit UPCA checkdigit Off	Transmit first digit UPCA On
 5.4.29	 5.4.33
Expand EAN8 to UPCA On	
 5.4.30	
Expand EAN8 to UPCA Off	
 5.4.31	

Code Representation

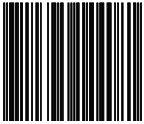
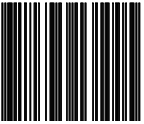






Transmission Check Character at Code 39 OFF	Transmission Check Character at Codebar OFF
 5.4.34	 5.4.38
Transmission Check Character at Code 39 On	Transmission Check Character at Codebar ON
 5.4.35	 5.4.39
Verification Check Character at Code 39 OFF	Verification Check Character at Codebar OFF
 5.4.36	 5.4.40
Verification Check Character at Code 39 ON	Verification Check Character at Codebar ON
 5.4.37	 5.4.41

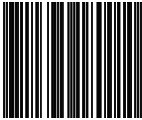




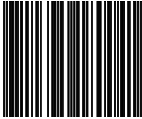
Transmission Check Character at Interleaved 2/5 OFF	Verification MSI Plessey Check Digit OFF
 5.4.42	 5.4.46
Transmission Check Character at Interleaved 2/5 ON	Verification modulo 10 MSI Plessey Check Digit
 5.4.43	 5.4.47
Verification Check Character at Interleaved 2/5 OFF	Verification double modulo 10 MSI Plessey Check Digit
 5.4.44	 5.4.48
Verification Check Character at Interleaved 2/5 ON	Verification modulo 11 MSI Plessey Check Digit
 5.4.45	 5.4.49

Verification Modulo 10 and 11 at MSI Plessey Check Digits	Transmission Check Digit at ISBN OFF
 5.4.50	 5.4.54
Transmission Check Digit at MSI Plessey OFF	Transmission Check Digit at ISBN ON
 5.4.51	 5.4.55
Transmission one MSI Plessey Check Digit	Transmission Check Digit at ISSN numbers OFF
 5.4.52	 5.4.56
Transmission two MSI Plessey Check Digits	Transmission Check Digit at ISSN numbers ON
 5.4.53	 5.4.57

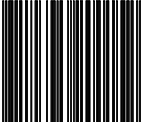
<p>Open/close without update programming mode preambles</p>	<p>Postamble = CR + LF</p>
 <p>5.1.1</p>	 <p>5.2.3</p>
<p>Exit programming mode preambles with update</p>	<p>Postamble = free format</p>
 <p>5.1.2</p>	 <p>5.2.4</p>
<p>Postamble = CR</p>	<p>Open/close without update programming mode postambles</p>
 <p>5.2.1</p>	 <p>5.2.5</p>
<p>Postamble = LF</p>	<p>Close programming mode postambles with update</p>
 <p>5.2.2</p>	 <p>5.2.6</p>

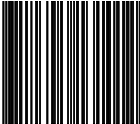
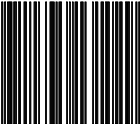

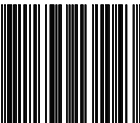




Set message format with code identifiers	Setting identifier UPCA
 5.3.1	 5.3.12
Set message format without code identifiers	Setting identifier UPCE
 5.3.2	 5.3.13
Setting identifier EAN13	Setting identifier EAN 128
 5.3.10	 5.3.14
Setting identifier EAN8	Setting identifier Code 128
 5.3.11	 5.3.15



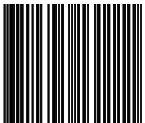

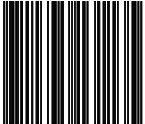
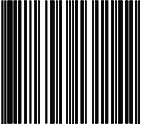


Setting identifier Code 39	Exit programming free prog ident. With update
 5.3.16	 5.3.20
Setting identifier Code 32	Exit programming free prog ident. Without update
 5.3.17	 5.3.21
Setting identifier Codabar	Setting identifier MSI Plessey
 5.3.18	 5.3.27
Setting identifier Interleaved 2/5	Setting identifier Code 93
 5.3.19	 5.3.28

Define control character Enable	Define control character Wait (forced to sleepmode)
 2.6.5	 2.6.12
Define control character Disable	Define control character Active (forced from sleepmode)
 2.6.6	 2.6.13
Define control character Reset	
 2.6.7	
Define control character Beep	
 2.6.11	


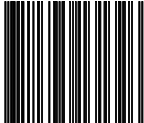
Handheld scanner connection Off	
 7.4.10	
Handheld scanner connection On	
 7.4.11	






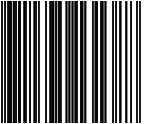


SG-15 Macro code (Omni directional only)	
 <p data-bbox="288 529 339 555">9.1.1</p> <p data-bbox="119 582 401 719">This macro programming bar code will set the following parameters: RS-232: 9600, 8, N, 1, No RTS/CTS Beeper: Off Sleepmode: Off Postamble: CR Scanner LED's: Off Code ID: On</p>	



<p style="text-align: center;">SOH</p>	<p style="text-align: center;">STX</p>
<p style="text-align: center;">  10.1.1 </p>	<p style="text-align: center;">  10.1.2 </p>
<p style="text-align: center;">ETX</p>	<p style="text-align: center;">EOT</p>
<p style="text-align: center;">  10.1.3 </p>	<p style="text-align: center;">  10.1.4 </p>
<p style="text-align: center;">ENQ</p>	<p style="text-align: center;">ACK</p>
<p style="text-align: center;">  10.1.5 </p>	<p style="text-align: center;">  10.1.6 </p>
<p style="text-align: center;">BEL</p>	<p style="text-align: center;">BS</p>
<p style="text-align: center;">  10.1.7 </p>	<p style="text-align: center;">  10.1.8 </p>


HT	LF
 10.1.9	 10.1.10
VT	FF
 10.1.11	 10.1.12
CR	SO
 10.1.13	 10.1.14
SI	DLE
 10.1.15	 10.1.16

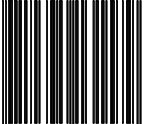







DC1  10.1.17	DC2  10.1.18
DC3  10.1.19	DC4  10.1.20
NAK  10.1.21	SYN  10.1.22
ETB  10.1.23	CAN  10.1.24


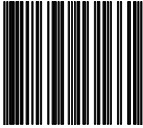






EM	SUB
 10.1.25	 10.1.26
ESC	FS
 10.1.27	 10.1.28
GS	RS
 10.1.29	 10.1.30
US	SP
 10.1.31	 10.1.32




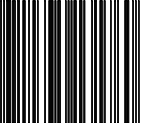




!	"
 10.1.34	 10.1.35
#	\$
 10.1.36	 10.1.37
%	&
 10.1.38	 10.1.39
'	(
 10.1.40	 10.1.41


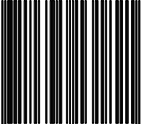






)	*
 10.1.42	 10.1.43
+	,
 10.1.44	 10.1.45
-	.
 10.1.46	 10.1.47
/	0
 10.1.48	 10.1.49


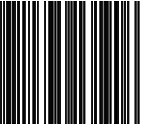






1	2
 10.1.50	 10.1.51
3	4
 10.1.52	 10.1.53
5	6
 10.1.54	 10.1.55
7	8
 10.1.56	 10.1.57


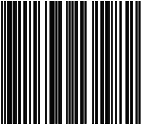


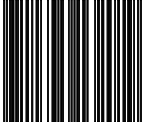
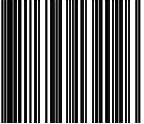


9	:
 10.1.58	 10.1.59
;	<
 10.1.60	 10.1.61
=	>
 10.1.62	 10.1.63
?	@
 10.1.64	 10.1.65


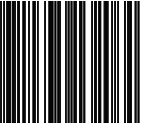

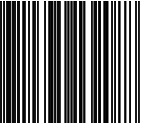

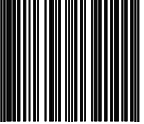


A	B
 10.1.66	 10.1.67
C	D
 10.1.68	 10.1.69
E	F
 10.1.70	 10.1.71
G	H
 10.1.72	 10.1.73


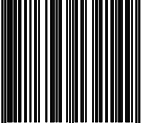

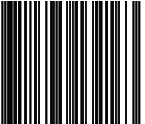




I	J
 10.1.74	 10.1.75
K	L
 10.1.76	 10.1.77
M	N
 10.1.78	 10.1.79
O	P
 10.1.80	 10.1.81

Q	R
 10.1.82	 10.1.83
S	T
 10.1.84	 10.1.85
U	V
 10.1.86	 10.1.87
W	X
 10.1.88	 10.1.89



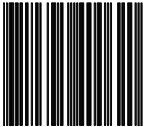
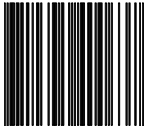
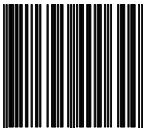
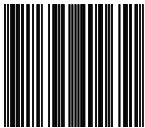

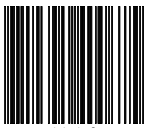
Y	Z
 10.1.90	 10.1.91
[\
 10.1.92	 10.1.93
]	^
 10.1.94	 10.1.95
_	`
 10.1.96	 10.1.97

a	b
 10.1.98	 10.1.99
c	d
 10.1.100	 10.1.101
e	f
 10.1.102	 10.1.103
g	h
 10.1.104	 10.1.105

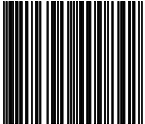
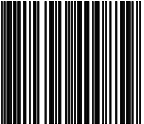






i	j
 10.1.106	 10.1.107
k	l
 10.1.108	 10.1.109
m	n
 10.1.110	 10.1.111
o	p
 10.1.112	 10.1.113

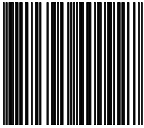
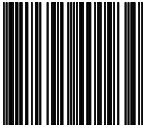
q	r
 10.1.114	 10.1.115
s	t
 10.1.116	 10.1.117
u	v
 10.1.118	 10.1.119
w	x
 10.1.120	 10.1.121

y	z
 10.1.122	 10.1.123
{	
 10.1.124	 10.1.125
}	~
 10.1.126	 10.1.127

F1	F2
 11.1.1	 11.1.2
F3	F4
 11.1.3	 11.1.4
F5	F6
 11.1.5	 11.1.6
F7	F8
 11.1.7	 11.1.8

F9	F10
 11.1.9	 11.1.10
F11	F12
 11.1.11	 11.1.12
TAB (KBW only)	ENTER (Alpha)
 11.1.13	 11.1.14
ENTER (Numeric)	Backspace
 11.1.15	 11.1.16

<p>Delete</p>  <p>11.1.17</p>	<p>Esc</p>  <p>11.1.18</p>
<p>Arrow left</p>  <p>11.1.19</p>	<p>Arrow right</p>  <p>11.1.20</p>
<p>Arrow up</p>  <p>11.1.21</p>	<p>Arrow down</p>  <p>11.1.22</p>
<p>Page up</p>  <p>11.1.23</p>	<p>Page down</p>  <p>11.1.24</p>

Home	End
 11.1.25	 11.1.26