



# CCD - 75 USB

## Programming Manual

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## **Introduction**

Bar code technology enables efficient data collection in various businesses including both commercial office and industrial automation . Importantly , bar code technology also ensures the accuracy of captured data . The bar code readers described in this manual have been developed for maximum efficiency , accuracy and ease of use in various process scenarios .

## **FCC Statement**

The federal communications commission( FCC ) requires that all CCD readers must be labeled with FCC approval .

This equipment complies with the requirements in part 15 of FCC rules for a class A computing device . These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment . This equipment generates , uses and can radiate radio frequency energy and , if not installed and used in accordance with the instruction manual , may cause harmful interface to radio communications . Operation of this equipment in a residential area may cause unacceptable interference to radio and TV reception requiring the operator to take whatever is necessary to correct the interface .

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## **Chapter 1. Technical Data**

This User's Manual introduces the technical specification of the bar code readers. The product features are described in later chapter e.g. installation, set-up and configuration as well as detailed technical specifications.

### **Main Technical FEATURES**

Bar code width	: 75mm
Depth of reading	: 0 to 40mm
Working current	: Scanning 84mA (with Decoder) Stand-by 14mA
Light	: Red LED array 660nm
Interface	: USB, RS232C, Keyboard Wedge, WAND, Notebook, TTL
Device Selection For Keyboard Interface	: PC AT/XT, PS/2 25, 30, 50, 60, 70, 80, Acer 7300, IBM 5550, Mac, NEC9800
Bar code selections	: Code39, Code32, CIP39 Coda Bar (CLSI) EAN-13, UPC-A, EAN-8, UPC-E (Add on 2 of 5) MSI/Plessey (UK Plessey ) Code 128 (EAN128) Code 93 Code 11 Interleaved 2 of 5 Industrial 2 of 5 Matrix 2 of 5 China Postal Code Telepen
Keyboard nationality	: US, French, German, Spanish, Italian, UK, Swiss, Belgium, Netherlands, Sweden, Norway, Denmark, Portugal, Finland, Slovakia, Japan, Hungary, Greece, Yugoslavia Cyrillic, Yugoslavia

## Chapter 2. How to install your Bar Code Reader

Installation :

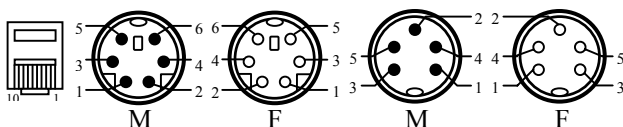
- Step 1. Turn off the power on your terminal device.
- Step 2. Connect the bar code reader to the appropriate outlet on the technical device depending on the model / interface cable that you have, e.g. USB, RS232, PS2, .....
- Step 3. Turn on the terminal device, you will hear the initial welcome music.
- Step 4. The reader is now in stand-by mode.

## Chapter 3. Pin Assignment

This bar code reader is designed to be connected via various cable connections, the pin assignments are listed as below :

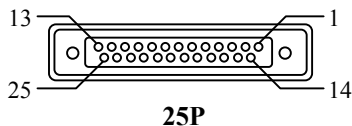
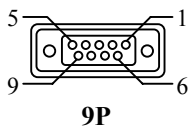
### 1. Keyboard Wedge :

#### A. 6 DIN and 5 DIN connector



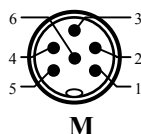
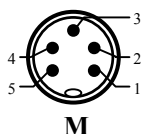
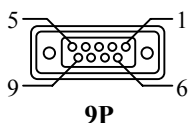
Phone Jack	DIN-6M	DIN-6F	Function	DIN-5M	DIN-5F
1	3	3	GND	4	4
2	4	4	VCC	5	5
3	--	5	K/B CLK	--	1
4	--	1	K/B DATA	--	2
5	1	--	SYS DATA	2	--
6	5	--	SYS CLK	1	--
7	--	--	--	--	--
8	--	--	--	--	--
9	--	--	--	--	--
10	--	--	--	--	--
	3	3	GND shield	4	4

## 2. RS-232 : 9 PIN and 25 PIN female RS-232 connector



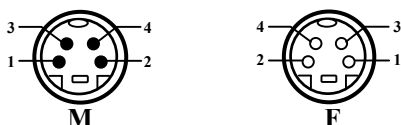
Phone Jack	9 Pin (F)	25 Pin (F)	Function
1	5.1	7.1	GND
2	9	16.25	VCC
3	--	--	K/B DATA
4	--	--	K/B CLK
5	--	--	SYS DATA
6	--	--	SYS CLK
7	7	4	CTS
8	2	3	TXD
9	3	2	RXD
10	8	5	RTS
	5	7	GND Shield

## 3. WAND Emulation : 9 PIN female and 5 DIN, 6 DIN male connector



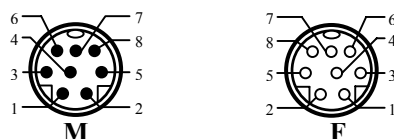
Phone Jack	Remark	Dsub 9P (F)	Dsub 9P (M)	DIN-5M	DIN-6M
1	GND	7.8	1	3	3
2	VCC	9	5	1	1
8	DATA	2	7	2	2
	GND Shield	7	1	3	3

#### 4. Apple MACINTOSH : 4 PIN female and 4 DIN male connector



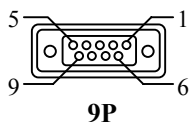
Phone Jack	Function	DIN-4M	DIM-4F
1	GND	4	4
2	VCC	3	3
3	K/B DATA	--	--
4	K/B CLK	--	--
5	SYS DATA	1	1
6	SYS CLK	--	--
7	--	--	--
8	--	--	--
9	--	--	--
10	--	--	--
	GND Shield	4	4

#### 5. NEC 9800 : 8 PIN female and 8 DIN male connector



Phone Jack	Function	DIN-8M	DIM-8F
1	GND	2	2
2	VCC	8	8
3	K/B DATA	--	4
4	K/B CLK	--	3
5	SYS DATA	4	--
6	SYS CLK	3	--
7	--	--	--
8	--	--	--
9	--	--	--
10	--	--	--
	Reset	1	1
	Retry	5	5
	--	6	6
	--	7	7
	GND Shield	2	2

## 6. TTL (CMOS) : 9 PIN female and 5 DIN, 6DIN male connector



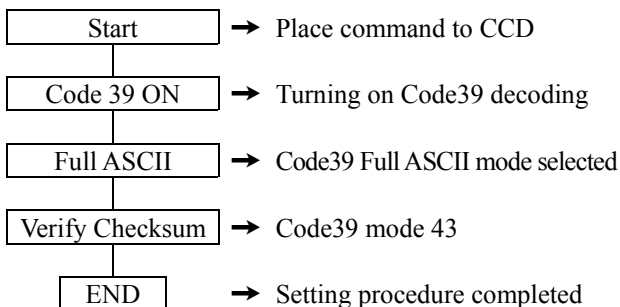
Phone Jack	Function	Dsub 9P (F)
1	GND	7
2	VCC+5V	9
3	DATA	1
4	INDICATOR	2
5	TRIGGER	3
6	ENABLE	4
7	SCAN	5
8	--	--
9	--	--
10	--	--
		GND Shield

## Chapter 4. Set Up Configuration

### 1. Example :

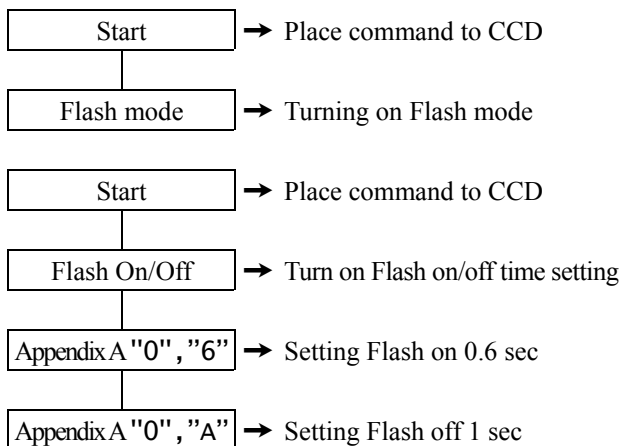
In order to setup the program for the bar code reader, you must be familiar with the setup procedure. Three examples are given below.

#### Example 1 : Setup Code 39 refer page 21

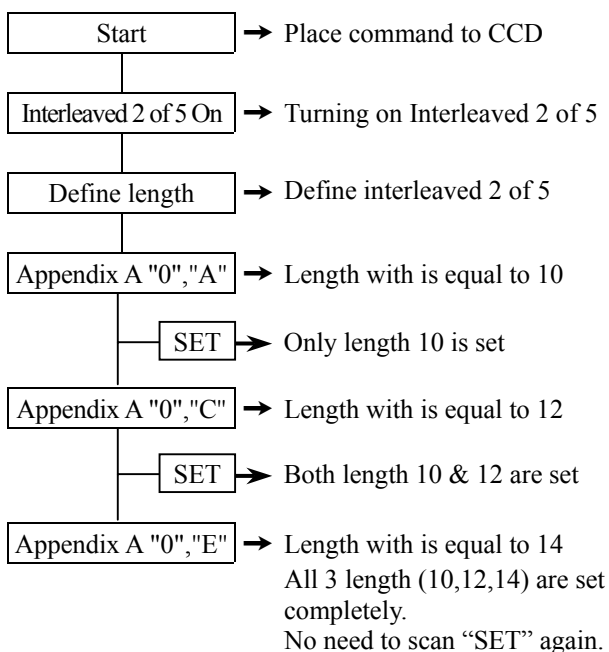




### Example 2 :



### Example 3 :



All Appendix A are no need to scan "END"

## 1. SET DEFAULT CONFIGURATION



Default

All programmed settings will be returned to the manufacture default setting after the scanning process.

### Other available option



Show configuration



Show version



Abort setting



Start up code

If the scanner's light is on, but it can not read. Try to scan the “start up code”. The scanner may read again.

## 2. INTERFACE OPTIONS



Start



\*Keyboard



AT Notebook



RS-232



WAND



End

Read the interface selection code for your particular application.

Above interfaces, only one can be enabled, other interfaces will be disabled automatically, ie, scan “Start”→ “RS232”→ “End”.



Mute

If you scan “Mute”, the initial welcome music will be on “Mute” mode when power on the terminal device

### 3. SYSTEM TYPE



Start



Apple Macintosh ADB



PC XT



NEC 9800



\*PC AT, PS/2 50 60 70 80



IBM 5550



PS/2 25 30



ACER 7300



End

Other system types may be available upon request,  
please consult your supplier for details.

## 4. KEYBOARD WEDGE SETTING



Start



\*On

### Upper/Lower case



Upper



\*Lower

### Number Keys



\*Alphanum



Number lock

### Upper Caps Lock



\*OFF



ON

### Alt+Number



\*OFF



ON



End

## 5. RS-232 SETTING



Start



On



1200

Baud Rate



\*9600



2400



19200



4800



38400



7 bit

Data Bits



\*8 bit



\*Disabled

Parity



Even



Odd



\*Disabled

RS-232 Hand  
Shaking



Xon/Xoff RS232



End



RTS/CTS RS232

## 6. WAND EMULATION SETTING



Start



On

**Bar High / Low**



\*High



Low

**Scan Speed**



Highest



\*High



Low



Lowest









End

## 7. SCANNING CONTROL



Start

Type	LED Light	Bar Code
 Trigger pressed	On-with button pressed Off-with button depressed	One bar code
 *Trigger on	On-for 3 seconds Off-any bar code scanned	One bar code
 Trigger on/off	On-with button pressed, light on for 3 seconds Off-with button pressed again	One bar code
 Trigger on 30 sec.	On-for 30 seconds Off-automatically after 30 seconds or button pressed again	One bar code
 Trigger on 120 sec.	On-for 120 seconds Off-automatically after 120 seconds or button pressed again	One bar code
 LED on	On-all the time Off-never off	One bar code





### Continuous reading

On-all the time	Same bar code
Off-never off or trigger off	Continuous
Soft time Default value is 1 sec	read



### Safety time setting

Scan "Start"+ "Safety time"+	Safety time 0.8
Appendix A "0", "8"	Sec
Set value is 0.8 Sec	



### Flash Mode

After turn ON or finish  
reading Barcode will  
continue on 60 sec than Flash

Default On 0.3sec, Off 0.2sec



### Flash on/off time

Scan "Start"→ "Flash on/off	Flash on 1 sec
time" Appendix A→"0", "A",	
"0", "6" the flash on 1 sec,	Flash off 0.6
flash off 0.6sec.	sec.

Flash on/off range 0.3~25.5sec

## 8. TURN ON VARIOUS BAR CODE FORMAT



Start

OFF



ON



Code 39\*



\*Interleaved 2 of 5



\*Industrial 2 of 5



\*Matrix 2 of 5



Coda Bar\*



EAN-13\*/UPC-A\*



EAN-8\*



UPC-E\*



**OFF**

\*EAN/UPC  
Add-on 2/5



Code 128\*



Code 11\*



\*MSI/Plessey



\*Telepen



\*China Postal  
Code



\*Code 93

**ON****Turn On All Bar Codes**

End

## 9. CODE IDENTIFIER



Start

### AIM



\*Off



On

### USER



Code 39



Interleaved 2 of 5



Industrial 2 of 5



Matrix 2 of 5



Coda Bar



EAN-13/UPC-A



EAN-8



UPC-E



Code 11



MSI



Code 128



Code 93



Plessey



TELEPEN

Please refer the Appendix B-ASCII table for the ID character you need, for example : scan appendix A “5” “3” for S or scan “5” “0” for P.

There is only one code identifier allowed on the specific type bar code.



End

## 10. CODE 39 CONTROL



Start



Off



\*On

### Code 32 Control



\*Off



On

### CIP 39 Control



\*Off



On



\*Standard type



Full ASCII

### Transmit start/stop character



\*No



Yes

### Verify MOD 43 checksum



\*No



Yes

### Transmit check character



No



\*Yes



End

## 11. INTERLEAVED 2 OF 5 CONTROL



Start



\*Off



On

**Verify MOD 10 checksum**



\*No



Yes

**Transmit check digit**



No



\*Yes



Define Length

You may set up to 3 fixed bar code lengths if necessary.

Please refer to the hexadecimal table in Appendix A,

for example : scan "0" "A" — 10

scan "0" "C" — 12

scan "0" "E" — 14

You will be able to read the interleaved 2 of 5 code length which is equal to 10, 12, 14 digits only.



End

## 12. INDUSTRIAL 2 OF 5 CONTROL



Start



\*Off



On

### Verify MOD 10 checksum



\*No



Yes

### Transmit check digit



No



\*Yes



Define Length

You may set up to 3 fixed bar code lengths if necessary.

Please refer to the hexadecimal table in Appendix A,

for example : scan "0" "A" — 10

scan "0" "C" — 12

scan "0" "E" — 14

You will be able to read the industrial 2 of 5 code length which is equal to 10, 12, 14 digits only.



End



### 13. MATRIX 2 OF 5 CONTROL



Start



\*Off



On

**Verify MOD 10 checksum**



\*No



Yes

**Transmit check digit**



No



\*Yes



Define Length

You may set up to 3 fixed bar code lengths if necessary.

Please refer to the hexadecimal table in Appendix A,

for example : scan "0" "A" — 10

scan "0" "C" — 12

scan "0" "E" — 14

You will be able to read the Matrix 2 of 5 code length  
which is equal to 10, 12, 14 digits only.



End

## 14. CODA BAR / NW7 CONTROL



Start



Off



\*On

### Transmit Start/End



\*No



Yes

### Start/End Transmit type



ABCD/ABCD



ABCD/TN\*E



\*ABCD/abcd



ABCD/tn\*e

### Verify MOD 16 checksum



\*No



Yes

### Transmit check character



\*No



Yes

### MOD 10-CLSI



\*No



Yes



End

## 15. EAN-13 CONTROL



Start



Off



\*On

**Truncate leading digit**



\*No



Yes

**Truncate leading 0**



\*No



Yes

**Transmit check digit**



No



\*Yes



End

## 16. UPC-A CONTROL



Start



Off



\*On

### Truncate leading digit



\*No



Yes

### Transmit check digit



No



\*Yes



End

## 17. EAN-8 CONTROL



Start



Off



\*On

**Truncate leading digit**



\*No



Yes

**Transmit check digit**



No



\*Yes



End

## 18. UPC-E CONTROL



Start



Off



\*On

**Truncate leading digit**



\*No



Yes

**Transmit check digit**



No



\*Yes



End

## 19. UPC/EAN CONVERSION



Start

### UPC-A To UPC-E Conversion



\*Off



On

### UPC-E To UPC-A Conversion



\*Off



On

### UPCA/EAN8 To EAN13 Conversion



\*Off



On

### ISBN Conversion



\*Off



On

## 20. CODE 11 CONTROL



Off



\*On

### Verify checksum



1



\*2

### Transmit check digit



No



\*Yes



End

## 21.MSI CODE CONTROL



Start

### MOD 10 Only



No



\*Yes

### MOD 10/MOD 10



\*No



Yes

### MOD 11/MOD 10



\*No



Yes

### Transmit check digit



\*1



2



No



\*Yes



End

## 22.TELEPEN MODE



Numeric



Alphanumeric

### Note :

To read these commands the telepen family MUST be enabled.

The default is Alphanumeric mode (at each power up of the reader).

## 23. CHINA POSTAL CODE CONTROL



Start



\*Off



On

**Verify MOD 10 check digit**



\*No



Yes

**Transmit check digit**



No



\*Yes



Define Length

You may set up to 3 fixed bar code lengths if necessary.  
Please refer to the hexadecimal table in Appendix B,  
for example :

scan "0" "A" — 10

scan "0" "C" — 12

scan "0" "E" — 14

You will be able to read the China Postal code length  
which is equal to 10, 12, 14 digits only.



End



## 24. END OF TEXT MESSAGE



Start

**None**



**\*CR**



**LF**  
**(for RS232 only)**



**CR/LF**  
**(for RS232 only)**



**Space**



**Tab**



**Esc**



**Ctrl-C**



End

## 25. PC AT KEYBOARD NATIONALITY



**Start**



**\*US**



**UK**



**French**



**Belgium**



**Sweden**



**Denmark**



**Germany**



**Netherlands**



**Norway**



**Spanish**



**Italian**



**Protugal**



**Japan**



**Hungary**



**Greece**



**Swiss**



**Finland**



**Slovakia**



**Yugoslavia**



**Yugoslavia Cyrillic**



**End**

## **26. SET PREFIX**



Start



Prefix

Please refer to Appendix B regarding the prefix string.  
You may add up to 10 characters as prefix.

## **27. SET SUFFIX**



Start



Suffix

Please refer to Appendix B regarding the suffix string.  
You may add up to 10 characters as suffix.

## 28. DATA FORMAT

Code ID number:

EAN13	00	Code 128	08
EAN8	01	Code 93	09
UPC E	02	Code 11	0A
Code 39	03	MSI	0B
Codabar	04	China Post	0C
Matrix 25	05	UK Plessy	0D
Industry 25	06	Telepen	0E
Interleaved 25	07	All	FF

Example :

Data	0	0	9	4	7	3	8	2	7	1	9	0
Reserve	01	02		03		01		04				01
Output	0	×	×	4	7	3	×	2	7	1	9	×
Delete	01	02		03		01		04				01
Output	×	0	9	×	×	×	8	×	×	×	×	0



Start



Reserve



Delete

Reserve

Delete

Reserve

Delete

Reserve

Delete

Appendix A "0", "3"	→	To set Code 39 data format
Appendix A "0", "1"	*	Delete
Appendix A "0", "2"	*	Reserve
Appendix A "0", "3"	*	Delete
Appendix A "0", "1"	*	Reserve
Appendix A "0", "4"	*	Delete
Appendix A "0", "1"	*	Reserve

Scan Please refer to the hexadecimal table in Appendix A  
 \*Finish Reserve or Delete to Scan "SET"

## 29. OTHER CONTROL



Start

### Buzzer tone frequency



\*Highest



Medium



Low



Mute

### Buzzer duration



\*50msec



20msec

### Keystroke / Character



\*Fastest



Fast



Medium



Slow



Character inter delay time Default to 1msec  
Please refer to the hexadecimal table in Appendix A  
Hex 00~FF (00~255msec unit 1msec)



End

## Appendix A : Hexadecimal / Decimal Table

0



1



2



3



4



5



6



7



8



9



A



B



C



D



E



F



SET






## Appendix B : Hex and Numeric table

(To read the desired hex and numeric selections)

DEC	HEX	PC	ASC II	DEC	HEX	PC & ASCII
0	00	(Null)	NULL	37	25	%
1	01	☺	SOH	38	26	&
2	02	☺	STX	39	27	'
3	03	♥	ETX	40	28	(
4	04	♦	EOT	41	29	)
5	05	♣	ENQ	42	2A	*
6	06	♠	ACK	43	2B	+
7	07	•	BEL	44	2C	,
8	08	◼	BS	45	2D	–
9	09	◦	HT	46	2E	.
10	0A	■	LF	47	2F	/
11	0B	♂	VT	48	30	0
12	0C	♀	FF	49	31	1
13	0D	♪	CR	50	32	2
14	0E	♪	SO	51	33	3
15	0F	⚙	SI	52	34	4
16	10	▶	DLE	53	35	5
17	11	◀	DC1	54	36	6
18	12	↑	DC2	55	37	7
19	13	!!	DC3	56	38	8
20	14	¶	DC4	57	39	9
21	15	§	NAK	58	3A	:
22	16	–	SYN	59	3B	;
23	17	↓	ETB	60	3C	<
24	18	↑	CAN	61	3D	=
25	19	↓	EM	62	3E	>
26	1A	→	SUB	63	3F	?
27	1B	←	ESC	64	40	@
28	1C	└	FS	65	41	A
29	1D	↔	GS	66	42	B
30	1E	▲	RS	67	43	C
31	1F	▼	US	68	44	D
32	20	Space		69	45	E
33	21	!		70	46	F
34	22	"		71	47	G
35	23	#		72	48	H
36	24	\$		73	49	I



DEC	HEX	PC & ASCII	DEC	HEX	PC & ASCII
74	4A	J	113	71	q
75	4B	K	114	72	r
76	4C	L	115	73	s
77	4D	M	116	74	t
78	4E	N	117	75	u
79	4F	O	118	76	v
80	50	P	119	77	w
81	51	Q	120	78	x
82	52	R	121	79	y
83	53	S	122	7A	z
84	54	T	123	7B	{
85	55	U	124	7C	
86	56	V	125	7D	}
87	57	W	126	7E	~
88	58	X	127	7F	Δ
89	59	Y	128	80	Ç
90	5A	Z	129	81	ü
91	5B	[	130	82	é
92	5C	\	131	83	â
93	5D	]	132	84	ä
94	5E	^	133	85	à
95	5F	_	134	86	â
96	60	`	135	87	ç
97	61	a	136	88	ê
98	62	b	137	89	ë
99	63	c	138	8A	è
100	64	d	139	8B	ï
101	65	e	140	8C	î
102	66	f	141	8D	ì
103	67	g	142	8E	Ä
104	68	h	143	8F	Å
105	69	i	144	90	É
106	6A	j	145	91	æ
107	6B	k	146	92	Æ
108	6C	l	147	93	Ô
109	6D	m	148	94	ö
110	6E	n	149	95	Ò
111	6F	o	150	96	û
112	70	p	151	97	ù

DEC	HEX	PC & ASCII	DEC	HEX	PC & ASCII
152	98	ÿ	190	BE	⌋
153	99	Ö	191	BF	⌌
154	9A	Ü	192	C0	⌍
155	9B	¢	193	C1	⌎
156	9C	£	194	C2	⌏
157	9D	¥	195	C3	⌐
158	9E	Pts	196	C4	—
159	9F	<i>f</i>	197	C5	⌑
160	A0	á	198	C6	⌒
161	A1	í	199	C7	⌓
162	A2	ó	200	C8	⌔
163	A3	ú	201	C9	⌕
164	A4	ñ	202	CA	⌖
165	A5	Ñ	203	CB	⌗
166	A6	<u>a</u>	204	CC	⌘
167	A7	<u>o</u>	205	CD	=
168	A8	č	206	CE	⌑
169	A9	┐	207	CF	⌒
170	AA	┐	208	D0	⌔
171	AB	½	209	D1	⌕
172	AC	¼	210	D2	⌗
173	AD	ı	211	D3	⌙
174	AE	«	212	D4	⌚
175	AF	»	213	D5	⌛
176	B0		214	D6	⌜
177	B1		215	D7	⌝
178	B2		216	D8	⌞
179	B3		217	D9	⌟
180	B4	┐	218	DA	┐
181	B5	┐	219	DB	■
182	B6	┐	220	DC	■
183	B7	┐	221	DD	■
184	B8	┐	222	DE	■
185	B9	┐	223	DF	■
186	BA		224	E0	α
187	BB	┐	225	E1	β
188	BC	⌋	226	E2	Γ
189	BD	⌋	227	E3	π

DEC	HEX	PC & ASCII		
228	E4	$\Sigma$		
229	E5	$\sigma$		
230	E6	$\mu$		
231	E7	$\Upsilon$		
232	E8	$\Phi$		
233	E9	$\theta$		
234	EA	$\Omega$		
235	EB	$\delta$		
236	EC	$\infty$		
237	ED	$\phi$		
238	EE	$\varepsilon$		
239	EF	$\cap$		
240	F0	$\equiv$		
241	F1	$\pm$		
242	F2	$\geq$		
243	F3	$\leq$		
244	F4	$\int$		
245	F5	$\int$		
246	F6	$\div$		
247	F7	$\approx$		
248	F8	$\circ$		
249	F9	●		
250	FA	•		
251	FB	$\sqrt{\quad}$		
252	FC	$\eta$		
253	FD	$^2$		
254	FE	■		
255	FF	(Bland)		

HEX	KEY	AT SCAN CODE
81	Home	E0 6C E0 F0 6C
82	End	E0 69 E0 F0 69
83	Page up	E0 7D E0 F0 7D
84	Page down	E0 7A E0 F0 7A
85	Insert	E0 70 E0 F0 70
86	Delete	E0 71 E0 F0 71
87	Numeric Keypad +	79 F0 79
88	Back Space	66 F0 66
89	Tab	0D F0 0D
8A	Enter	5A F0 5A
8B	←	E0 6B E0 F0 6B
8C	→	E0 74 E0 F0 74
8D	Numeric Keypad Enter	E0 5A E0 F0 5A
8E	↑	E0 75 E0 F0 75
8F	↓	E0 72 E0 F0 72
90	F1	05 F0 05
91	F2	06 F0 06
92	F3	04 F0 04
93	F4	0C F0 0C
94	F5	03 F0 03
95	F6	0B F0 0B
96	F7	83 F0 83
97	F8	0A F0 0A
98	F9	01 F0 01
99	F10	09 F0 09
9A	F11	78 F0 78
9B	Esc	76 F0 76
9C	F12	07 F0 07
9D*	Left Shift+1 character	12 “C” F0 “C” F0 12
9E*	Left Ctrl +1 character	14 “C” F0 “C” F0 14
9F*	Left Alt +1 character	11 “C” F0 “C” F0 11
A0	Numeric Keypad -	7B F0 7B
A1	Numeric Keypad *	7C F0 7C
A2	Numeric Keypad /	E0 4A E0 F0 4A
A3	Caps Lock	58 F0 58
A4	Num Lock	77 F0 77
A5	Left Alt	11 F0 11
A6	Left Ctrl	14 F0 14

HEX	KEY	AT SCAN CODE
A7	Left Shift	12 F0 12
A8	Right Alt	E0 11 E0 F0 11
A9	Right Ctrl	E0 14 E0 F0 14
AA	Right Shift	59 F0 59
AB**	Left Alt Make	11
AC**	Left Alt Break	F0 11
AD**	Left Ctrl Make	14
AE**	Left Ctrl Break	F0 14
AF	Print Screen	E0 12 E0 7C E0 F0 7C E0 F0 12
B0	Shift Tab	12 0D F0 0D F0 12
B1***	Alt +Numeric	E0 11 "C" F0 "C" E0 F0 11

ASCII "A" make code is 1C

\* Example

"Start" "Prefix"

1<sup>st</sup> Configurable Prefix ="9" "E"

2<sup>nd</sup> Configurable Prefix ="4" "1" => ASCII "A"

"SET"

Scanner will transmit 14 <1C F0 1C > F0 14

\*\* Example

"Start" "Prefix"

1<sup>st</sup> Configurable Prefix ="A" "B"

2<sup>nd</sup> Configurable Prefix ="4" "1" => ASCII "A"

3 Configurable Prefix ="A" "C"

"SET"

on "Lower case" Scanner will transmit

11 <12 1C F0 1C F0 12> F0 11

on "Upper case" Scanner will transmit

11 <1C F0 1C> F0 11

\*\*\* Show ASCII Example

"Start" "Prefix"

1<sup>st</sup> Configurable Prefix ="B" "1"

2<sup>nd</sup> Configurable Prefix ="6" "4" => ASCII "d"

DEC "1" "0" "0"

"SET"

Scanner will transmit

11 <69 F0 69> <70 F0 70> <70 F0 70 > F0 11



Start



\*Off

**Barcode Function**

**key**






































On



End

To scan a function key barcode with input data, please refer to function key value table (page 43, 44)

 Home	 End
 Page Up	 Page down
 Insert	 Delete
 Enter	 Back Space
 Tab	 Shift Tab
 <-	 ->
 v	 ^
 Num Lock	 Print Screen

 F1	 F2
 F3	 F4
 F5	 F6
 F7	 F8
 F9	 F10
 F11	 F12
 Numeric Keypad Enter	 Numeric Keypad+
 Numeric Keypad -	 Numeric Keypad *
 Numeric Keypad /	 Caps Lock
 Esc	