

# **EC-2D8380BT Image Scanner Programming Manual**

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# Quick-start

## Restore defaults

Scan the “Restore Custom defaults”.



Restore Custom defaults



Write to Custom Defaults

## Quick-start : 2.4G/433M

The factory has been matched and you can use it directly.

Matching Operation:

- 1, Press the button, the buzzer rang “Di-di-di” , the blue light is on, the scanner starts.  
Note: In the 2.4g mode of the Bluetooth scanner , the light is green.
- 2, Plug the dongle, the blue light is on, the Dongle starts to work.
- 3, Please match the dongle and the scanner within 30 seconds!
- 4, Open a text, put the cursor in, Scan your barcode.



Match(match the scanner and the dongle)

## Quick-start : Bluetooth

### For Android、IOS

- 1, Press the button, the scanner starts, The red light flashing and the blue light is on which means in matching mode.
- 2, The Scanner name: “Scanner xxx”, xxx is 3 random Numbers.
- 3, Choose the scanner is going to pair with the host, When the connection is successful, the red light goes out and the blue light is on , the buzzer rang “DI-di”.

### Recommending use 2.4G mode or wire-USB at the windows!

- 1, Switch the Bluetooth scanner to 2.4G mode, plug in the 2.4G-dongle, and scan the "Match" Barcode.
- 2, Use the USB-cable to connect the computer.

# General Settings

## Match and Network (2.4G, 433M)

### Match:

Plug the dongle to your computer, the system will automatically install the driver, when it start to work , the blue light is always on, Match the scanner and the dongle by scan the “Match” Barcode.

- (1) Matching successfully: the buzzer rang “ Di-da-di”, “DI-di-di”.
- (2) Matching failed: the buzzer rang “ Di---en”.

If pairing fails, please unplug the dongle and try the matching operation again.

### Network: One to one , More to one

One to one —one scanner to one dongle

- 1, Plug the dongle to your computer.
- 2, Scan the “Match” bar code to Match the dongle.

More to one —several scanners to one receiver.

If you have 3 scanners: scanner A, scanner B, scanner C.

- 1, Plug the dongle to your computer.
- 2, Match for the scanner A: A scan the "Match" Barcode.
- 3, Unplug the dongle and Plug the dongle again.
- 4, Match for the scanner B: B scan the "Match" Barcode.
- 5, Unplug the dongle and Plug the dongle again.
- 6, Match for the scanner C: C scan the "Match" Barcode.
- 7, After that ,3 scanners can transmit the data to the dongle.

At "More to one", Which scanner is the data received?

You can set different prefix characters to distinguish which scanner uploads the data.

For example :

- A scanner sets the prefix character "A".
- B scanner sets the prefix character "B".
- C scanner sets the prefix character "C".

## Working Mode

Two upload mode: Instant upload mode、 storage mode.

### Instant upload Mode

Instant upload data to your computer.



Instant upload Mode

- (1) Upload successful: The status light flashed and the buzzer rang " Di ".
- (2) Upload failed: The red light flashed and the buzzer rang " Di---en".  
If you receive upload-failed, Please confirm the match is successful.
- If you receive upload-successful but no data, Please confirm the dongle in USB-HID mode.

### Storage Mode

Scan and store barcode inside the scanner, and uploaded the data to your computer when you need it.



Storage Mode

Note: Instant upload mode and storage mode, the sound of reading barcode is different.

 Show total storage (Show total number of memory)	 Upload Data (Upload Data to your computer)
 Zero clearing (Clear all data in memory, Please use it with caution)	




- 1, Save successful: The status light flashed and the buzzer rang " Di-en ".
- 2, Save failed: The red light flashed and the buzzer range " Di---en", This indicates that there was not enough memory to save the bar code. Please upload the saved bar code by scanning "Upload Date" and then clear the Memory by scanning "Zero cleaning".
- 3, Upload completed: the buzzer rang " Di-do-en ".

## Transmission speed

### HID-speed

Set the delay between each character, the range of 00-99 can be set. the larger the value, the slower.

 No delay	 HID-speed 5	 HID-speed 10
 HID-speed 15	 HID-speed 20	 HID-speed 30

 HID-speed 40	 HID-speed 50	 HID-speed 60
<p>1, In 2.4G or 433M mode, this parameter is stored in the dongle and defaults is "No delay". When there is no matching dongle, scanning this setting code is invalid.</p> <p>2, In Bluetooth mode, this parameter is stored in the scanner, the default is "HID-speed 30".</p> <p>3, In Bluetooth mode, If the data is lost, please set a slower HID speed.</p>		




**Upload speed**

For storage mode, set the time delay between each barcode, the range of 001-255 can be set. the larger the value, the slower, the defaults is "010".

 Upload-speed 000	 Upload-speed 001	 Upload-speed 002
 Upload-speed 005	 Upload-speed 010*	 Upload-speed 015
 Upload-speed 040	 Upload-speed 050	 Upload-speed 060

**Interface setup**

Suitable for wired scanner, Dongle, Base.

 USB-HID*	 USB-COM	 TTL/RS232
<p>Note1: It supports 25 languages in USB-HID mode, Please refer to appendix 3.</p> <p>Note2: Dongle and wired-USB mode support USB-HID, USB -COM.</p> <p>Note3: In use, no data is uploaded . It may be set to USB-COM or TTL/RS232.</p>		

**Dongle indicator light**

- (1) Blue LED always on means the dongle is normal.
- (2) Blue LED flashing means the dongle is broken or the USB port is bad.










**Base indicator light**

- (1) Blue LED always on indicates that the dongle is normal.
- (2) Blue LED flashing means the dongle is broken or the USB port is bad.
- (3) Green LED always on means the base and scanner are in good contact.

**Power and Standby**



Battery Reserve (show battery level)

Shutdown time setting	
 90s	 2min*
 5min	 30min
 60min	 166min40s
There are 2 setting codes set for Not shutdown.	
 Not shutdown	 Not shutdown-Enabled once
 Shutdown	

**Battery level indication**

- 1, The scanner starts, when the buzzer rang "Di-di-di" and the blue light is on with no red light flashing, it indicates that the battery is sufficient.

- The scanner starts, when the buzzer rang "Di-di-di" and the blue light is on with the red light flashes three times, it indicates that the battery less than 20%, please charge the scanner as soon as possible.
- The scanner starts, when the buzzer rang "Di-di-di" and the blue light is on with the red light flashes three times, it indicates that the battery less than 5%, The scanner enters the low battery protection mode. Please charge the scanner at least for 30 minutes.
- Press the button, the scanner does not respond. Please charge the scanner at least for 30 minutes. If the scanner still cannot start, this indicates that the battery is broken and needs to be replaced.

**LED tips during charging**

Plugged the USB cable into the USB port of computer.

- Charging mode: the status light is on with the red light flashing.
- Charging completed: the status light is on and the red light goes out.
- Micro-current charging: the status light off and the red light flashing, this is battery protection phase, please do not use it in this condition.



**Bluetooth- Setup**

- Bluetooth scanner has three modes: Bluetooth, 2.4G, Wire.
- The default mode of the scanner is Bluetooth mode.

Press the button, the buzzer rang "Di-di-di", The red light flashing and the blue light is on which means in matching mode, the green light is on which means in 2.4G mode,

**Bluetooth/2.4G Switch operation**









- Press the button for 10seconds,
- Scan the settings barcode.

 Bluetooth-mode	 2.4G-mode*
---	---












**Switch process description**

In Bluetooth mode, Press and hold the button for 10seconds, the buzzer rang " Di-da-di", "DI-di-di". Means that the switching operation is complete, Release the button, The green light is on which means the scanner successfully switches to 2.4G-mode.

In 2.4G mode, Press and hold the button for 10seconds, the buzzer rang " Di-da-di", "DI-di-di". Means that the switching operation is complete, Release the button, The blue light is on which means the scanner successfully switches to Bluetooth-mode.






Bluetooth Mode		
 Bluetooth-HID	 Bluetooth-SPP	 Bluetooth-BLE
IOS keyboard		
 Show/hide IOS keyboard		
Note: Scan this barcode to show/hide the keyboard in IOS		
 Show/hide IOS keyboard double-click -ON*	 Show/hide IOS keyboard double-click -OFF	
Bluetooth connection settings		
 Off connection	 Connection initialization	

**Buzzer setup**





 Turn on all sounds*	 Turn off all sounds	
 Sound frequency 2048HZ	 Sound frequency 2731HZ	
 Low volume	 Medium volume	 High volume *
Sound settings		
 Beep after good decode-ON*	 Beep after good decode-OFF	
 Boot sound-ON*	 Boot sound-OFF	

 Setup code sound-ON*	 Setup code sound-OFF*
---	--

### End character

End character is used to mark the end of a barcode data.	
 CR *	 LF
 Tab	 CR+LF
 None	

### Capital & Lowercase

 Swap capital/lowercase	 All lowercase
 All capital	 Don't convert *

## Barcode Reading function

### ID, ON/OFF, Min-digits

#### Barcode-ID:

The scanner defines ID characters for each type of barcode, we can use the Code ID prefix to identify the barcode type.

 Send ID-OFF *	 Send ID-ON
--	---







No.	Barcode-ID	Barcode type
1	a	UPC-A, UPC-E, EAN-8, EAN-13
2	b	Code 39, Code 32
3	c	Coda bar
4	d	Code 128
5	e	Code 93
6	f	Interleaved 2 of 5
7	g	Discrete 2 of 5
8	h	CODE11
9	i	MSI
11	j	GS1-DataBar, /UCC/EAN-128
12	k	Bookland EAN, Bookland EAN/ISBN
13	l	Trioptic Code 39
14	m	Coupon Code
15	n	GS1DataBar-14, GS1DataBarLimited, GS1DataBar Expanded, RSS
16	o	SETUP128
17	p	PDF417
18	q	Data Matrix(DM)
19	r	QR
20	s	Aztec Code
21	t	Maxi Code
22	u	Veri Code
23	v	HanXin

#### Minimum digits:

In order to prevent error codes, the scanner sets the minimum number of digits for barcode reading, Bar codes less than the default minimum digit are not readable.

### Duplicate barcode upload Setup

For a period of time, the same barcode is not allowed to be read continuously to avoid repeated upload.




 <p>Duplicate detection-OFF* (upload duplicate barcode)</p>	 <p>Duplicate detection-ON (Unable to upload duplicate barcode)</p>
 <p>Duplicate detection 1 S</p>	 <p>Duplicate detection 5 S</p>
 <p>Duplicate detection 10 S</p>	 <p>Duplicate detection 25 S</p>
<p>For example: Set the "Duplicate detection 5 S". After scanning A bar code, the scanning A bar code will not be uploaded within 5 seconds, and it will be handled as upload failure, Scan other barcodes and then scan A barcode to upload.</p>	



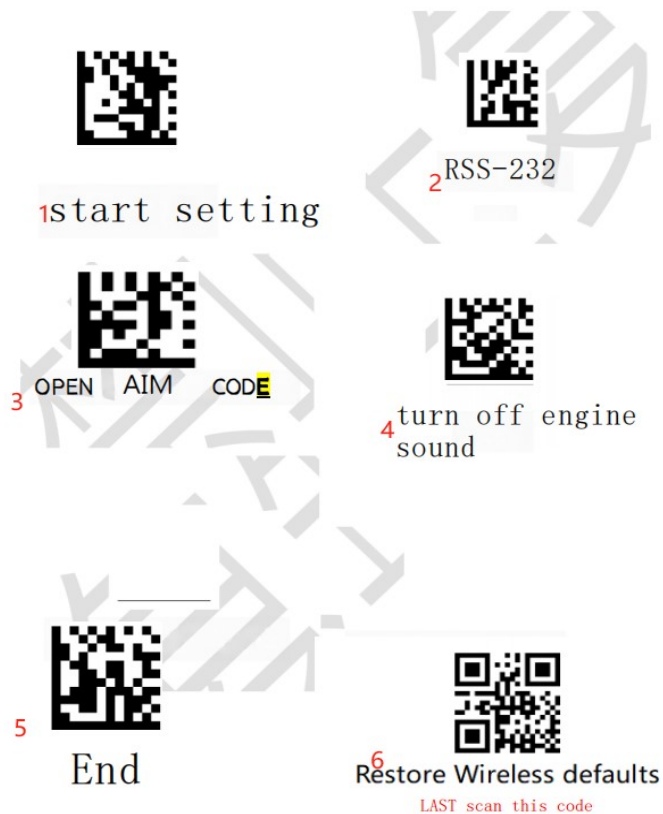
# Barcode Parameter Settings

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Factory Default		
	<b>Set</b>	
	Factory default settings	%++%
	<b>End</b>	

Note !!!! The wireless scanner should be set default as follow 1-6



1 start setting

2 RSS-232

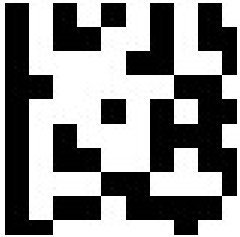
3 OPEN AIM CODE

4 turn off engine sound

5 End

6 Restore Wireless defaults  
LAST scan this code

## Customer's Factory Default

	<b>Set</b>	
	Save customer's factory default	%C++D%
	Delete customer's factory default	%C--D%
	<b>End</b>	

# Scan Mode

	<b>Set</b>	
	<b>Handheld Mode</b>	MD01
	Hands Free Mode	MD02
	Continue Scan	MD03
	<b>End</b>	

# Continue Scan

## Standby Time


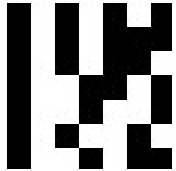
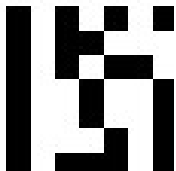
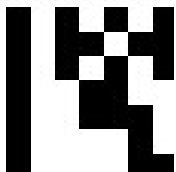

	<b>Set</b>	
	Disable	ST0
	<b>5 minutes</b>	ST1
	10 minutes	ST2
	<b>End</b>	

# Standby Time

	<b>Set</b>	
	15 minutes	ST3
	20 minutes	ST4
	25 minutes	ST5
	30 minutes	ST6
	<b>End</b>	


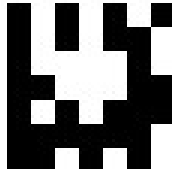
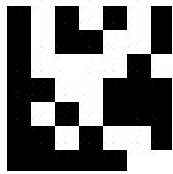
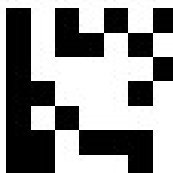
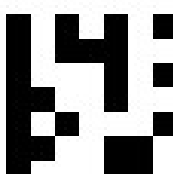

## Delay Time for Same Code

	<b>Set</b>	
	200 msec	SD0
	250 msec	SD1
	300 msec	SD2
	<b>End</b>	


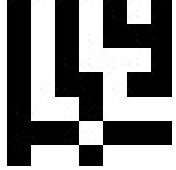
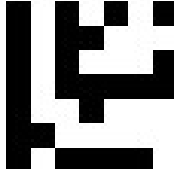
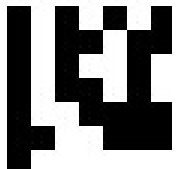
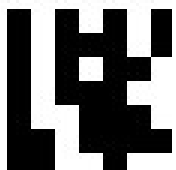

<b>Interface</b>		
	<b>Set</b>	
	RS232	OP01
	<b>USB Keyboard</b>	OP02
	USB Virtual COM Port	OP03
	<b>End</b>	

<b>Terminal Character</b>	
	<b>Set</b>


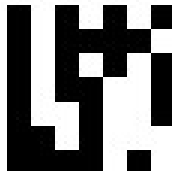
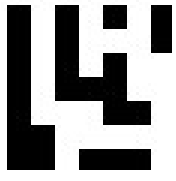



		
	None	TC01
	CR/LF	TC02
	CR	TC03
	TAB	TC04
	<b>End</b>	


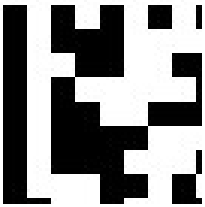
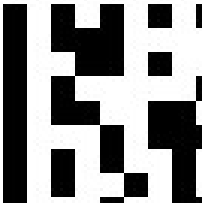
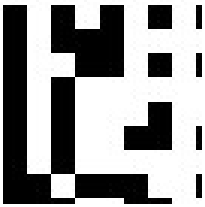

# RS232 Baud Rate

	<b>Set</b>	
	9600	BR01
	19200	BR02
	38400	BR03
	57600	BR04
	<b>End</b>	

# RS232 Baud Rate

	<b>Set</b>	
	115200	BR05
	230400	BR06
	<b>End</b>	

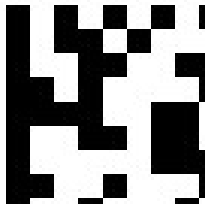
# Aiming Pattern

	<p><b>Set</b></p>
	<p>On</p>
	<p>Always On</p>
	<p>Off</p>
	<p><b>End</b></p>

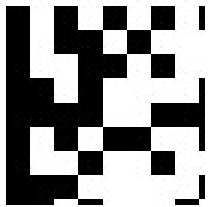
# Illumination



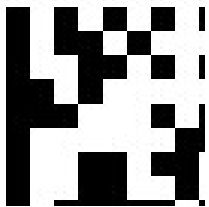
**Set**



**On**



Always On


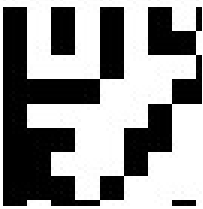
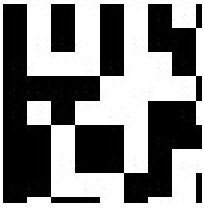
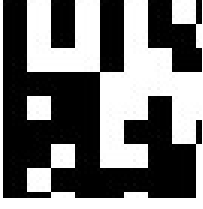



Off



**End**

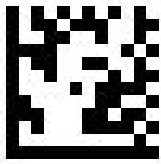
# Good Read Beep Frequency

	<b>Set</b>
	Low
	<b>Medium</b>
	High
	<b>End</b>

# Voice

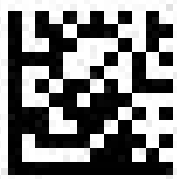


**Set**



**Enable voice**

%+VOC%



**Disable voice**

%-VOC%

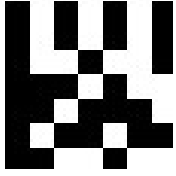
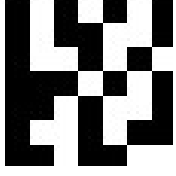


**End**


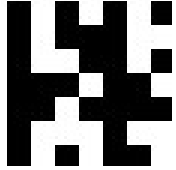
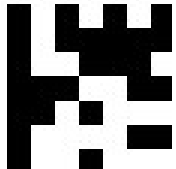
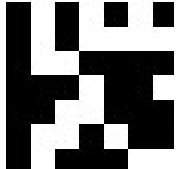
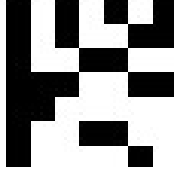

# Keyboard Caps Lock State

	<b>Set</b>	
	<b>Caps Lock Off</b>	CS0
	Caps Lock On	CS1
	<b>End</b>	


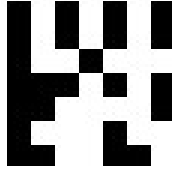
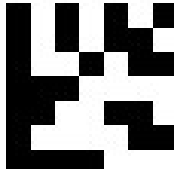
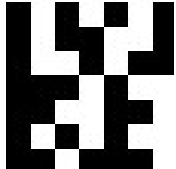
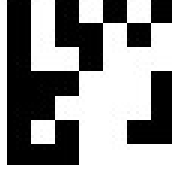



<b>Country Mode</b>		
	<b>Set</b>	
	<b>U.S.</b>	KM00
	Belgium	KM01
	Britain	KM02
	Denmark	KM03
	<b>End</b>	

# Country Mode

	<b>Set</b>	
	France	KM04
	Germany	KM05
	Italy	KM06
	Norway	KM07
	<b>End</b>	


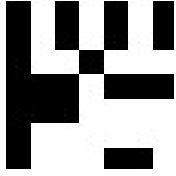
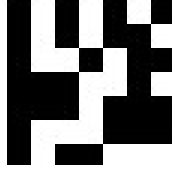
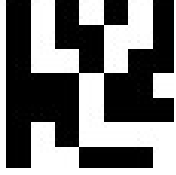

# Country Mode

	<b>Set</b>	
	Portugal	KM08
	Spain	KM09
	Sweden	KM10
	Switzerland	KM11
	<b>End</b>	


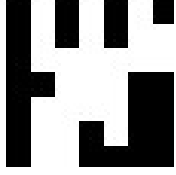
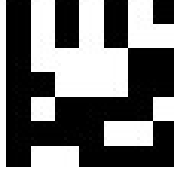
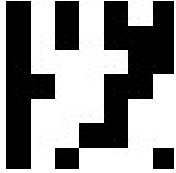
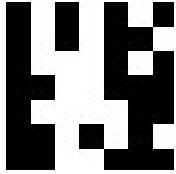

# Country Mode

	<b>Set</b>	
	Japan	KM12
	Hungary	KM13
	Czech Republic	KM14
	Slovakia	KM15
	<b>End</b>	

## Country Mode

	<b>Set</b>	
	Romania	KM16
	Croatia	KM17
	Poland	KM18
	<b>End</b>	


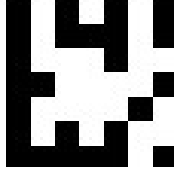
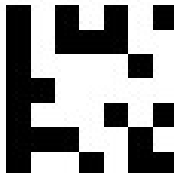
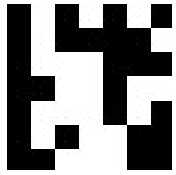
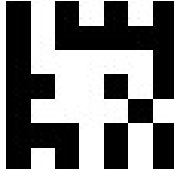

# Readable Codes

	<b>Set</b>	
	Enable All	EC00
	Default	FC00
	<b>Enable UPC-A</b>	EC01
	Disable UPC-A	DC01
	<b>End</b>	

# Readable Codes


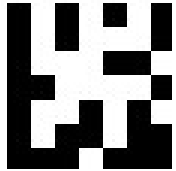
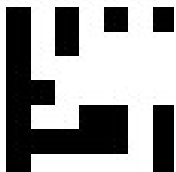
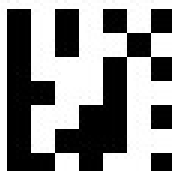
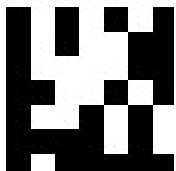

	<b>Set</b>	
	<b>Enable UPC-E</b>	EC02
	Disable UPC-E	DC02
	<b>Enable EAN 8</b>	EC03
	Disable EAN 8	DC03
	<b>End</b>	

# Readable Codes


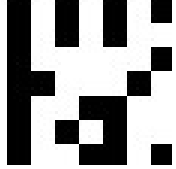
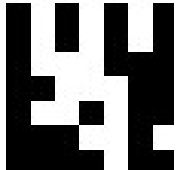
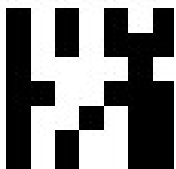
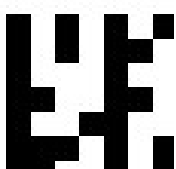

	<b>Set</b>	
	<b>Enable EAN 13</b>	EC04
	Disable EAN 13	DC04
	<b>Enable Code 128</b>	EC05
	Disable Code 128	DC05
	<b>End</b>	




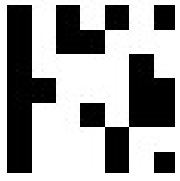
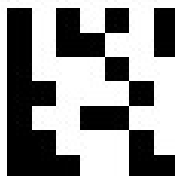
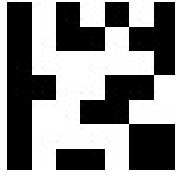
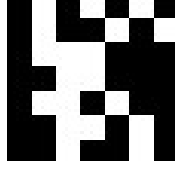

# Readable Codes

	<b>Set</b>	
	<b>Enable Code 39</b>	EC06
	Disable Code 39	DC06
	<b>Enable Code 93</b>	EC07
	Disable Code 93	DC07
	<b>End</b>	


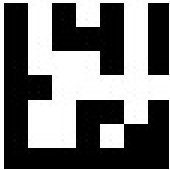
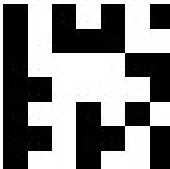
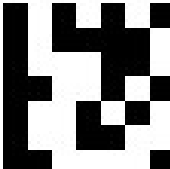
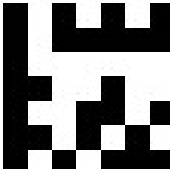

# Readable Codes

	<b>Set</b>	
	Enable Code 32	EC08
	Disable Code 32	DC08
	Enable Code 11	EC09
	Disable Code 11	DC09
	<b>End</b>	


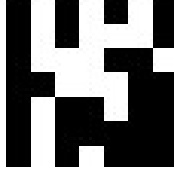
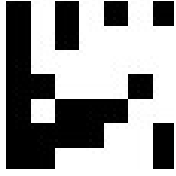
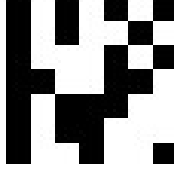
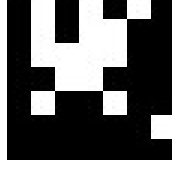

# Readable Codes

	<b>Set</b>	
	<b>Enable Codabar</b>	<b>EC10</b>
	Disable Codabar	DC10
	Enable Plessey	EC11
	Disable Plessey	DC11
	<b>End</b>	

# Readable Codes

	<b>Set</b>	
	Enable MSI/ Plessey	EC12
	Disable MSI/ Plessey	DC12
	<b>Enable Interleaved 2 of 5</b>	<b>EC13</b>
	Disable Interleaved 2 of 5	DC13
	<b>End</b>	

# Readable Codes

	<b>Set</b>	
	Enable IATA 2 of 5	EC14
	Disable IATA 2 of 5	DC14
	Enable Matrix 2 of 5	EC15
	Disable Matrix 2 of 5	DC15
	<b>End</b>	

# Readable Codes

	<b>Set</b>	
	Enable Straight 2 of 5	EC16
	Disable Straight 2 of 5	DC16
	Enable Pharmacode	EC17
	Disable Pharmacode	DC17
	<b>End</b>	

# Readable Codes

	<b>Set</b>	
	<b>Enable RSS 14</b>	EC18
	Disable RSS 14	DC18
	<b>Enable RSS Expanded</b>	EC19
	Disable RSS Expanded	DC19
	<b>End</b>	

# Readable Codes


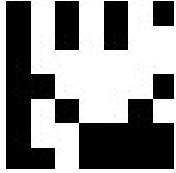
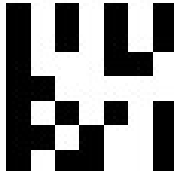
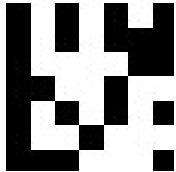

	<b>Set</b>	
	<b>Enable RSS Limited</b>	EC20
	Disable RSS Limited	DC20
	Enable Ccomponent CC-A	EC21
	Disable Ccomponent CC-A	DC21
	<b>End</b>	



# Readable Codes

	<b>Set</b>	
	Enable Ccomponent CC-B	EC22
	Disable Ccomponent CC-B	DC22
	Enable Ccomponent CC-C	EC23
	Disable Ccomponent CC-C	DC23
	<b>End</b>	

# Readable Codes

	<b>Set</b>	
	<b>Enable PDF417</b>	EC24
	Disable PDF417	DC24
	<b>Enable Micro PDF417</b>	EC25
	Disable Micro PDF417	DC25
	<b>End</b>	


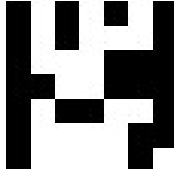
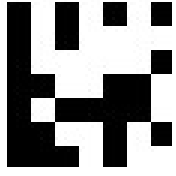

# Readable Codes


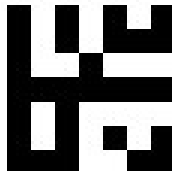
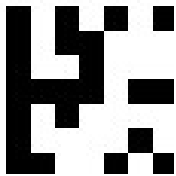

	<b>Set</b>	
	<b>Enable Data Matrix</b>	EC26
	Disable Data Matrix	DC26
	<b>Enable QR</b>	EC27
	Disable QR	DC27
	<b>End</b>	


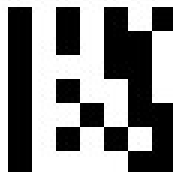
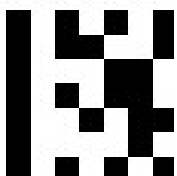
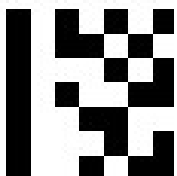
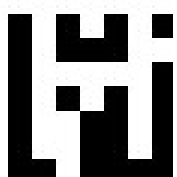

# Readable Codes


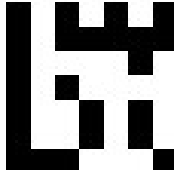
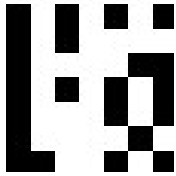

	<b>Set</b>	
	<b>Enable Micro QR</b>	EC28
	Disable Micro QR	DC28
	Enable Aztec	EC29
	Disable Aztec	DC29
	<b>End</b>	

# Readable Codes


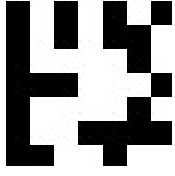
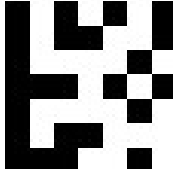
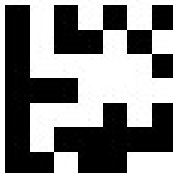
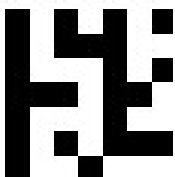

	<b>Set</b>	
	Enable MaxiCode	EC30
	Disable MaxiCode	DC30
	<b>End</b>	


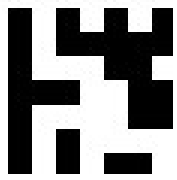
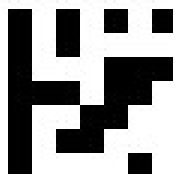

<b>UPC / EAN</b>		
	<b>Set</b>	
	Enable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8	UN01
	<b>Disable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8</b>	UN02
	<b>End</b>	


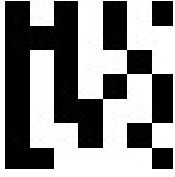
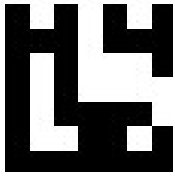
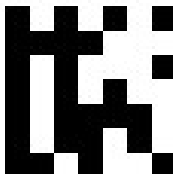
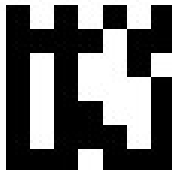

<b>UPC-A</b>		
	<b>Set</b>	
	<b>Enable UPC-A Number System digit</b>	UA01
	Disable UPC-A Number System digit	UA02
	<b>Enable UPC-A check digit.</b>	UA03
	Disable UPC-A check digit	UA04
	<b>End</b>	


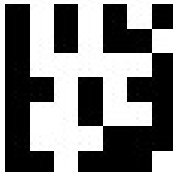
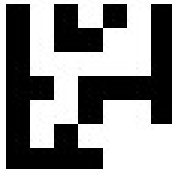
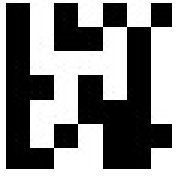
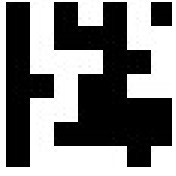

<b>UPC-A</b>		
	<b>Set</b>	
	Enable conversion of UPC-A to EAN13	UA05
	<b>Disable conversion of UPC-A to EAN13</b>	UA06
	<b>End</b>	



<b>UPC-E</b>		
	<b>Set</b>	
	<b>Enable UPC-E Number System digit</b>	UE01
	Disable UPC-E Number System digit	UE02
	<b>Enable UPC-E check digit</b>	UE03
	Disable UPC-E check digit	UE04
	<b>End</b>	

<b>UPC-E</b>		
	<b>Set</b>	
	Enable conversion of UPC-E to UPC-A	UE05
	<b>Disable conversion of UPC-E to UPC-A</b>	UE06
	<b>End</b>	

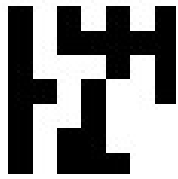
<b>EAN 8</b>		
	<b>Set</b>	
	<b>Enable EAN 8 check digit</b>	E801
	Disable EAN 8 check digit	E802
	Enable conversion of EAN 8 to EAN 13	E803
	<b>Disable conversion of EAN 8 to EAN 13</b>	E804
	<b>End</b>	

<b>EAN 13</b>		
	<b>Set</b>	
	<b>Enable EAN 13 check digit</b>	ED01
	Disable EAN 13 check digit	ED02
	Enable conversion of EAN 13 to ISBN	ED03
	<b>Disable conversion of EAN 13 to ISBN</b>	ED04
	<b>End</b>	

# EAN 13

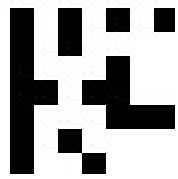


**Set**



Enable conversion of EAN 13 to ISSN

ED05


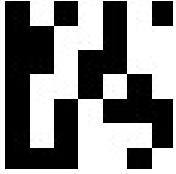
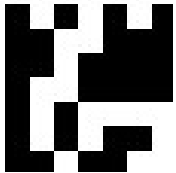
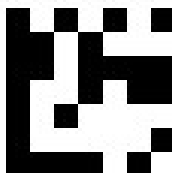
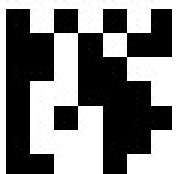



**Disable conversion of EAN 13 to ISSN**


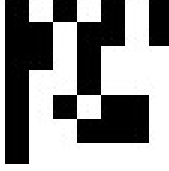
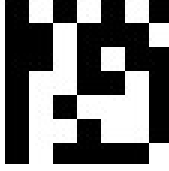
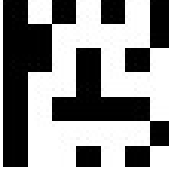

ED06


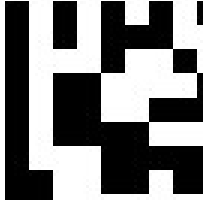
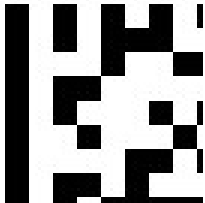
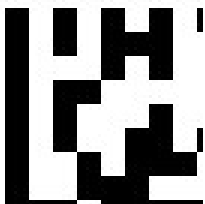



**End**

<b>Code 39</b>		
	<b>Set</b>	
	Enable Code 39 full ASCII mode	C39a
	<b>Disable Code 39 full ASCII mode</b>	C39b
	Enable Start and Stop characters	C39c
	<b>Disable Start and Stop characters</b>	C39d
	<b>End</b>	





## Code 39

	<b>Set</b>	
	<b>Disable Checksum</b>	C39e
	Enable checksum and send check character	C39f
	Enable checksum and strip check character	C39g
	<b>End</b>	

<b>Codabar</b>		
	<b>Set</b>	
	<b>Disable Checksum</b>	CBRa
	Enable checksum and send check character	CBRb
	Enable checksum and strip check character	CBRc
	<b>End</b>	





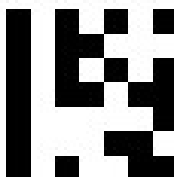
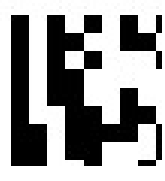
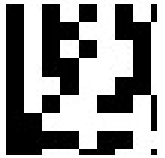

# Data Matrix

	<b>Set</b>	
	<b>Enable mirror decoding</b>	DMXa
	Disable mirror decoding	DMXb
	<b>End</b>	


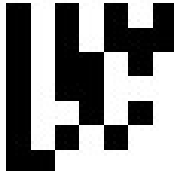
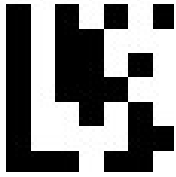

# Data Matrix

	<b>Set</b>	
	Enable rectangular Data Matrix decoding	DMXc
	<b>Disable rectangular Data Matrix decoding</b>	DMXd
	<b>End</b>	

# QR / Micro QR

	<b>Set</b>	
	<b>Enable mirror decoding</b>	QR01
	Disable mirror decoding	QR02
	UTF8 conversion for word only	QRC0
	<b>Universal UTF8 conversion</b>	QRC1
	<b>End</b>	

# Aztec

	<b>Set</b>	
	<b>Enable mirror decoding</b>	AZ01
	Disable mirror decoding	AZ02
	<b>End</b>	






























AIM ID Table :

Symbology	AIM	Default enable
UPC-A	E	*
UPC-E	E	*
EAN 8	E	*
EAN 13	E	*
Code 128	C	*
Code 39	A	*
Code 93	G	*
Code 32	X	
Code 11	H	
Codabar	F	*
Plessey	P	
MSI / Plessey	M	
Interleaved 2 of 5	I	*
IATA 2 of 5	R	
Matrix 2 of 5	X	
Straight 2 of 5	S	
Pharmacode	X	
RSS 14	e	*
RSS Expanded	e	*
RSS Limited	e	*
Component CC-A	e	

Component CC-B	e	
Component CC-C	e	
PDF417	L	*
Micro PDF417	L	*
Data Matrix	d	*
QR	Q	*
Micro QR	Q	*
Aztec	Z	
MaxiCode	U	


## Data editing
















### Relevant setting barcode

 Insert Characters	 Delete characters	
Barcode types(Barcode data: 068000-068018)		
 @08000@ All barcode types	 @08001@ UPC&EAN	 @08002@ Code39
 @08003@ Coda bar	 @08004@ Code128	 @08005@ Code93
 @08006@ Interleaved 2 of 5	 @08008@ Code11	 @08009@ MSI
 @08015@ GS1-Databar	 @08017@ PDF417	 @08018@ Data Matrix
 @08019@ QR	 @08020@ Aztec Code	 @08021@ Maxi Code
Do not scan = All barcode types.		
Set save location (Barcode data: 068100-068107) (Different group Settings can take effect at the same time)		
 @08100@ Group 1	 @08101@ Group 2	 @08102@ Group 3
 @08103@ Group 4	 @08104@ Group 5	 @08105@ Group 6
 @08106@ Group 7	 @08107@ Group 8	Do not scan = Group 1
Edit location		
 Before barcode	From which place to start? Setup by barcode in "ASCII Barcode Table".	 After barcode
Save to take effect		
 Save Settings	 Clear settings	

**Example: Insert character**

In the process of setting, scan the irrelevant barcode, the scanner will exit setting status.  
Please scan in order 1,2,3, ...


Example: Code128=123456789 










	Insert Ab before	Insert Cd from the third	Insert Ef after
1		 Insert Characters	
2		 @08000@ All barcode types (Omit this step, default all barcode types)	
3		 @08100@ Group 1 (Omit this step, default Group 1)	
4	 Before barcode	 @09003@ 003 ETX	 After barcode
5	 @09065@ 065 A	 @09067@ 067 C	 @09069@ 069 E
6	 @09098@ 098 b	 @09100@ 100 d	 @09102@ 102 f
Each group can insert within 10 characters			
7	 Save Settings		
Setup result			
	Ab123456789	123Cd456789	123456789Ef
	Clear insert character setting. Please scan in order 1,2.	 1, Insert Characters	 2, Clear settings

- 1, set different bar code type, make this setting to this kind of barcode is effective.
- 2, set different group, make different Settings take effect at the same time




**Example: Delete character**

In the process of setting, scan the irrelevant barcode, the scanner will exit setting status.  
Please scan in order 1,2,3, ...

Example: Code128=123456789 












	Delete 1 bit before	Delete 3 bit from the third	Delete 3 bit after
1		 Delete characters	
2		 @08000@ All barcode types (Omit this step, default all barcode types)	
3		 @08100@ Group 1 (Omit this step, default Group 1)	
4	 Before barcode	 @09003@ 003 ETX	 After barcode
5	 @09001@ 001 SOH	 @09002@ 002 STX	 @09003@ 003 ETX








6	 Save Settings	
Setup result		
23456789	1236789	123456
Clear delete character setting, Please scan in order 1,2.	 1, Delete characters	 2, Clear settings

- 1, set different bar code type, make this setting to this kind of bar code is effective.
- 2, set different group, make different Settings take effect at the same time.




**Quick delete character**

 Delete 1 bit before	 Delete 1 bit after
 Delete 2 bit before	 Delete 2 bit after
 Delete 3 bit before	 Delete 3 bit after
 Delete 4 bit before	 Delete 4 bit after
 Delete 2 bit from the third	 Delete 2 bit from the fourth
 Clear Quick delete character Settings	

**Quick insert character**

 Insert A before	 Insert A after
 Insert A from the second	 Insert AB from the third
 Clear Quick insert character Settings	





**Quick replaces character**

 'A' replaces '1'	 'AB' replaces '1'
 Clear Quick replaces character Settings	









**Time system**









Only for the wireless series

**Time setting and examples**

 Output time	 Set Year Month Day
 Set Hour Minute Second	 Save settings

**Examples**

step	Set Y.M.D-20.06.10
1	 Set Year Month Day
2	 @09002@ 002 STX
3	 @09000@ 000 NUL/SP
4	 @09000@ 000 NUL/SP
5	 @09006@ 006 ACK
6	 @09001@ 001 SOH
7	 @09000@ 000 NUL/SP
8	 Save settings

step	Set H:M:S-16:34:30
1	 Set Hour Minute Second
2	 @09001@ 001 SOH
3	 @09006@ 006 ACK
4	 @09003@ 003 ETX
5	 @09004@ 004 EOT
6	 @09003@ 003 ETX
7	 @09000@ 000 NUL/SP
8	 Save settings

**Date format**

 default:2020.06.10	 American:06.10.2020	 British:10.06.2020
 Date delimiter character "."-default		 Date delimiter character "/"

## Time output and examples

### Time-prefix/suffix

 Time-prefix/suffix -OFF*	 Time-prefix	 Time-suffix
---	--	--


### Insert time by data editing












Replace time with a key combination (NUL+SOH)

 NUL+SOH=Time-OFF	 NUL+SOH=Time-ON*
---	---

### Example-Insert Time

In the process of setting, scan the irrelevant barcode, the scanner will exit setting status.

Example: Code128=123456789 

	Before barcode	From the third	After barcode
1		 Insert Characters	
2		 All barcode types (Omit this step, default all barcode types)	
3		 Group 1 (Omit this step, default Group 1)	
4	 Before barcode	 003 ETX	 After barcode
5		 000 NUL/SP	
6		 001 SOH	
7		 Save Settings	
<b>Setup result</b>			
	Time123456789	123Time456789	123456789Time
	Clear insert character setting, Please scan in order 1,2.	 1, Insert Characters	 2, Clear settings

---

## LED description

1, Wired scanner: Green light.

Green: Always on when working, Turn off when reading.

2, 2.4G wireless scanner: Blue + Red light.

Blue: Always on when working, Turn off when reading.

Red: Low power indicator, charging breathing light.

3, 433M wireless scanner: Blue + Red light.

Blue: Always on when working, Turn off when reading.

Red: Low power indicator, charging breathing light.

4, Bluetooth scanner: Blue + Green + Red light

Blue: Bluetooth status light.

Always on when working, turn off when reading.

Green: 2.4G status-light.

Always on when working, turn off when reading.

Red: Low power indicator, charging breathing light.

5, 2.4G-dongle/ 433M-dongle: Blue light.

Blue: Always on when working.

Flashing means the dongle is broken or the USB port is bad.

6, Base: Blue + Green light.

Blue: Always on when working.

Flashing means the dongle is broken or the USB port is bad.

Green: Always on means the base and scanner are in good contact.

## FAQ

1, In wired mode, there is no data upload?

- ① Scanner is set to storage mode? Please set to instant upload mode.
- ② Scanner is set to USB-COM? Please set to USB-HID.

2, 2.4G/433M connected but no data upload?

- ① Scanner is set to storage mode?

Unplug and plug the dongle, Scan setting code: "Match" in 30 seconds, then scan "instant upload mode".

- ② Scanner is set to USB-COM?

Unplug and plug the dongle, Scan setting code: "Match" in 30 seconds, then scan "USB-HID".

3, Can't search the scanner?

- ① Make sure the scanner is in HID-mode.
- ② Whether the scanner in matching state?
- ③ Scan " Connection initialization ", delete the matched scanner, and re-pair operation.

4, Bluetooth connected but not upload?

- ① Scanner set to storage mode? Please set to Instant upload mode.
- ② Scanner set to 2.4G mode (check status light).
- ③ Please check the Bluetooth mode (HID,SPP,BLE).

5, Barcode characters is wrong?

- ① Set the scanner keyboard nations with using the keyboard.
- ② Set more slow HID speed.

6, Turn on, Scanner red light flashing three times and then shut down?

- ① Low battery, please charge.

## Factory Defaults-Caution



Factory Defaults (caution)

More support, please contact the manufacturer.

**Appendix 1: ASCII characters**

Hex	Dec	Description	Hex	Dec	Description
#00	0	NUL(CTRL @)	#22	34	"
#01	1	SOH(CTRL A)	#23	35	#
#02	2	STX(CTRL B)	#24	36	\$
#03	3	ETX(CTRL C)	#25	37	%
#04	4	EOT(CTRL D)	#26	38	&
#05	5	ENQ(CTRL E)	#27	39	'
#06	6	ACK(CTRL F)	#28	40	(
#07	7	BEL(CTRL G)	#29	41	)
#08	8	BS(Backspace)	#2A	42	*
#09	9	HT(Tab)	#2B	43	+
#0A	10	LF(CTRL J)	#2C	44	,
#0B	11	VT(CTRLK)	#2D	45	—
#0C	12	FF(CTRL L)	#2E	46	°
#0D	13	CR(Enter)	#2F	47	/
#0E	14	SO(CTRL N)	#30	48	0
#0F	15	SI(CTRLO)	#31	49	1
#10	16	DLE(CTRLP)	#32	50	2
#11	17	DC1(CTRL Q)	#33	51	3
#12	18	DC2(CTRL R)	#34	52	4
#13	19	DC3(CTRL S)	#35	53	5
#14	20	DC4(CTRLT)	#36	54	6
#15	21	NAK(CTRL U)	#37	55	7
#16	22	SYN(CTRL V)	#38	56	8
#17	23	ETB(CTRL W)	#39	57	9
#18	24	CAN(CTRL X)	#3A	58	:
#19	25	EM(CTRL Y)	#3B	59	;
#1A	26	SUB(CTRL Z)	#3C	60	<
#1B	27	ESC(ESC)	#3D	61	=
#1C	28	FS(CTRL \)	#3E	62	>
#1D	29	GS(CTRL ])	#3F	63	?
#1E	30	RS(CTRL ^)	#40	64	@
#1F	31	US(CTRL _)	#41	65	A
#20	32	(space)	#42	66	B
#21	33	!	#43	67	C

Hex	Dec	Description	Hex	Dec	Description
#44	68	D	#66	102	f
#45	69	E	#67	103	g
#46	70	F	#68	104	h
#47	71	G	#69	105	i

















































#48	72	H	#6A	106	j
#49	73	I	#6B	107	k
#4A	74	J	#6C	108	l
#4B	75	K	#6D	109	m
#4C	76	L	#6E	110	n
#4D	77	M	#6F	111	o
#4E	78	N	#70	112	p
#4F	79	O	#71	113	q
#50	80	P	#72	114	r
#51	81	Q	#73	115	s
#52	82	R	#74	116	t
#53	83	S	#75	117	u
#54	84	T	#76	118	v
#55	85	U	#77	119	w
#56	86	V	#78	120	x
#57	87	W	#79	121	y
#58	88	X	#7A	122	z
#59	89	Y	#7B	123	{
#5A	90	Z	#7C	124	
#5B	91	[	#7D	125	}
#5C	92	\	#7E	126	~
#5D	93	]	#7F	127	DEL
#5E	94	^	#80	128	F1
#5F	95	_	#81	129	F2
#60	96	`	#82	130	F3
#61	97	a	#83	131	F4
#62	98	b	#84	132	F5
#63	99	c	#85	133	F6
#64	100	d	#86	134	F7
#65	101	e	#87	135	F8




















































Hex	Dec	Description	Hex	Dec	Description
#88	136	F9	#AA	170	Home Keypad
#89	137	F10	#AB	171	end Keypad
#8A	138	F11	#AC	172	Page Up Keypad
#8B	139	F12	#AD	173	Page Down Keypad
#8C	140	Left shift make	#AE	174	Up Arrow Keypad
#8D	141	Left shift break	#AF	175	Down Arrow Keypad
#8E	142	Right shift mark	#B0	176	Left Arrow Keypad
#8F	143	Right shift break	#B1	177	Right Arrow Keypad
#90	144	Left ALT mark	#B2	178	Center Keypad
#91	145	Left ALT break	#B3	179	Insert
#92	146	Right ALT mark	#B4	180	Delete
#93	147	Right ALT break	#B5	181	Home
#94	148	Left control mark	#B6	182	End
#95	149	Left control break	#B7	183	Page Up
#96	150	Right control mark	#B8	184	Page Down
#97	151	Right control break	#B9	185	Up Arrow
#98	152	/Keypad	#BA	186	Down Arrow
#99	153	*Keypad	#BB	187	Left Arrow
#9A	154	-Keypad	#BC	188	Right Arrow
#9B	155	+Keypad	#BD	189	
#9C	156	-Keypad	#BE	190	Num Lock
#9D	157	enter Keypad	#BF	191	Caps Lock
#9E	158	0Keypad	#C0	192	Scroll Lock
#9F	159	1Keypad	#C1	193	Print Screen
#A0	160	2Keypad	#C2	194	Pause
#A1	161	3Keypad			
#A2	162	4Keypad			
#A3	163	5 Keypad			
#A4	164	6 Keypad			
#A5	165	7 Keypad			
#A6	166	8 Keypad			
#A7	167	9 Keypad			
#A8	168	Insert Keypad			
#A9	169	Delete Keypad			














































## Appendix 2: ASCII Barcode Table

Barcode data: 069000-069194

 @09000@ <b>000 NUL/SP</b>	 @09001@ <b>001 SOH</b>	 @09002@ <b>002 STX</b>
 @09003@ <b>003 ETX</b>	 @09004@ <b>004 EOT</b>	 @09005@ <b>005 ENQ</b>
 @09006@ <b>006 ACK</b>	 @09007@ <b>007 BEL</b>	 @09008@ <b>008 Back Space</b>
 @09009@ <b>009 HT/TAB</b>	 @09010@ <b>010 LF</b>	 @09011@ <b>011 VT</b>
 @09012@ <b>012 FF</b>	 @09013@ <b>013 CR/ENTER</b>	 @09014@ <b>014 SO</b>
 @09015@ <b>015 SI</b>	 @09016@ <b>016 DLE</b>	 @09017@ <b>017 DC1</b>
 @09018@ <b>018 DC2</b>	 @09019@ <b>019 DC3</b>	 @09020@ <b>020 DC4</b>
 @09021@ <b>021 NAK</b>	 @09022@ <b>022 SYN</b>	 @09023@ <b>023 ETB</b>
 @09024@ <b>024 CAN</b>	 @09025@ <b>025 EM</b>	 @09026@ <b>026 SUB</b>
 @09027@ <b>027 ESC</b>	 @09028@ <b>028 FS</b>	 @09029@ <b>029 GS</b>
 @09030@ <b>030 RS</b>	 @09031@ <b>031 US</b>	 @09032@ <b>032 SP</b>
 @09033@ <b>033 !</b>	 @09034@ <b>034 "</b>	 @09035@ <b>035 #</b>
 @09036@ <b>036 \$</b>	 @09037@ <b>037 %</b>	 @09038@ <b>038 &amp;</b>
 @09039@ <b>039 '</b>	 @09040@ <b>040 (</b>	 @09041@ <b>041 )</b>
 @09042@ <b>042 *</b>	 @09043@ <b>043 +</b>	 @09044@ <b>044 ,</b>
 @09045@ <b>045 -</b>	 @09046@ <b>046 .</b>	 @09047@ <b>047 /</b>
























 @09048@ <b>048</b> 0	 @09049@ <b>049</b> 1	 @09050@ <b>050</b> 2
 @09051@ <b>051</b> 3	 @09052@ <b>052</b> 4	 @09053@ <b>053</b> 5
 @09054@ <b>054</b> 6	 @09055@ <b>055</b> 7	 @09056@ <b>056</b> 8
 @09057@ <b>057</b> 9	 @09058@ <b>058</b> :	 @09059@ <b>059</b> ;
 @09060@ <b>060</b> <	 @09061@ <b>061</b> =	 @09062@ <b>062</b> >
 @09063@ <b>063</b> ?	 @09064@ <b>064</b> @	 @09065@ <b>065</b> A
 @09066@ <b>066</b> B	 @09067@ <b>067</b> C	 @09068@ <b>068</b> D
 @09069@ <b>069</b> E	 @09070@ <b>070</b> F	 @09071@ <b>071</b> G
 @09072@ <b>072</b> H	 @09073@ <b>073</b> I	 @09074@ <b>074</b> J
 @09075@ <b>075</b> K	 @09076@ <b>076</b> L	 @09077@ <b>077</b> M
 @09078@ <b>078</b> N	 @09079@ <b>079</b> O	 @09080@ <b>080</b> P
 @09081@ <b>081</b> Q	 @09082@ <b>082</b> R	 @09083@ <b>083</b> S
 @09084@ <b>084</b> T	 @09085@ <b>085</b> U	 @09086@ <b>086</b> V
 @09087@ <b>087</b> W	 @09088@ <b>088</b> X	 @09089@ <b>089</b> Y
 @09090@ <b>090</b> Z	 @09091@ <b>091</b> [	 @09092@ <b>092</b> \
 @09093@ <b>093</b> ]	 @09094@ <b>094</b> ^	 @09095@ <b>095</b> _
 @09096@ <b>096</b> `	 @09097@ <b>097</b> a	 @09098@ <b>098</b> b

 099 c	 100 d	 101 e
 102 f	 103 g	 104 h
 105 i	 106 j	 107 k
 108 l	 109 m	 110 n
 111 o	 112 p	 113 q
 114 r	 115 s	 116 t
 117 u	 118 v	 119 w
 120 x	 121 y	 122 z
 123 {	 124	 125 }
 126 ~	 127 DEL	 128 F1
 129 F2	 130 F3	 131 F4
 132 F5	 133 F6	 134 F7
 135 F8	 136 F9	 137 F10
 138 F11	 139 F12	 140  _Shift on
 141  _Shift off	 142 r_Shift on	 143 r_Shift off
 144  _Alt on	 145  _Alt off	 146 r_Alt on
 147 r_Alt off	 148  _Ctrl on	 149  _Ctrl off

 @09150@ <b>150 r_Ctrl on</b>	 @09151@ <b>151 r_Ctrl off</b>	 @09152@ <b>152 /(KP)</b>
 @09153@ <b>153 *(KP)</b>	 @09154@ <b>154 -(KP)</b>	 @09155@ <b>155 +(KP)</b>
 @09156@ <b>156 _(KP)</b>	 @09157@ <b>157 Enter(KP)</b>	 @09158@ <b>158 0(KP)</b>
 @09159@ <b>159 1(KP)</b>	 @09160@ <b>160 2(KP)</b>	 @09161@ <b>161 3(KP)</b>
 @09162@ <b>162 4(KP)</b>	 @09163@ <b>163 5(KP)</b>	 @09164@ <b>164 6(KP)</b>
 @09165@ <b>165 7(KP)</b>	 @09166@ <b>166 8(KP)</b>	 @09167@ <b>167 9(KP)</b>
 @09168@ <b>168 Inert</b>	 @09169@ <b>169 Delete</b>	 @09170@ <b>170 Home</b>
 @09171@ <b>171 End</b>	 @09172@ <b>172 Page Up</b>	 @09173@ <b>173 Page Down</b>
 @09174@ <b>174 Up</b>	 @09175@ <b>175 Down</b>	 @09176@ <b>176 Left</b>
 @09177@ <b>177 Right</b>	 @09178@ <b>178 Center</b>	 @09179@ <b>179 Insert</b>
 @09180@ <b>180 Delete</b>	 @09181@ <b>181 Home</b>	 @09182@ <b>182 End</b>
 @09183@ <b>183 Page Up</b>	 @09184@ <b>184 Page Down</b>	 @09185@ <b>185 Up</b>
 @09186@ <b>186 Down</b>	 @09187@ <b>187 Left</b>	 @09188@ <b>188 Right</b>
 @09189@ <b>189</b>	 @09190@ <b>190 Num Lock</b>	 @09191@ <b>191 caps lock</b>
 @09192@ <b>192 scroll lock</b>		

### Appendix 3: Language

 @0005000@ <b>UNITED STATES</b>	 @00005009@ <b>FRANCE</b>	 @0005018@ <b>SERBIA/YUGOSLAVIA</b>
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 @0005001@ BELGIUM	 @0005010@ GERMANY	 @0005019@ SLOVENIA
 @0005002@ BRAZIL	 @0005011@ HUNGARY	 @0005020@ SPAIN
 @0005003@ CANADIAN-FRENCH	 @0005012@ ITALY	 @0005021@ SWEDEN
 @0005004@ CROATIA	 @0005013@ LATIN AMERICA	 @0005022@ SWITZERLAND (FRENCH)
 @0005005@ CZECHOSLOVAKIA (CZECH)	 @0005014@ NETHERLANDS	 @0005023@ SWITZERLAND (GERMAN)
 @0005006@ CZECHOSLOVAKIA (SLOVAK)	 @0005015@ NORWAY	 @0005024@ UNITED KINGDOM
 @0005007@ DENMARK	 @0005016@ POLAND	 @0005025@ UNIVERSAL
 @0005008@ FINLAND	 @0005017@ PORTUGAL	

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**Manufacturer: EC LINE**

Thank you very much for using EC Line product

For service, please contact [service@ecline.com.hk](mailto:service@ecline.com.hk)

[www.eclinepos.com](http://www.eclinepos.com)