

BARCODE SCANNER MODULE (B)

SETUP MANUAL

PREFACE

This setup manual provides setup barcode for setting device parameters. This module does not support commands to modify the settings. All setup barcodes can only be used to set up the device and cannot be used to test the scan results. If you need to test the module, please use the test barcode in the appendix.

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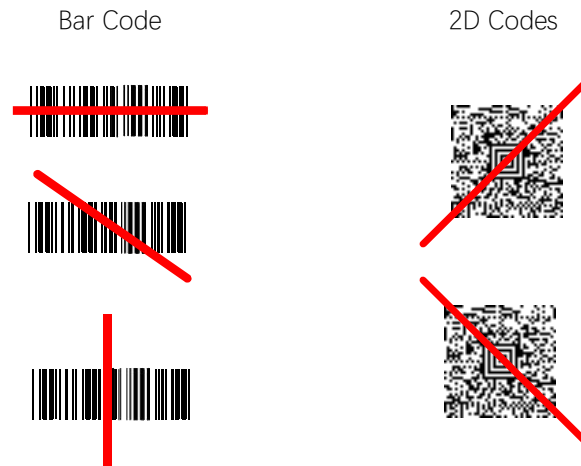
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CHAPTER I SCANNING GUIDE

The aiming auxiliary light source for the Barcode Scanner Module (B) projects a red aiming light speed corresponding to the horizontal field of view of the module. The aiming line should be in the center of the barcode and the user can rotate the light, but please keep it in the center of the barcode for easy reading.



The aiming beam or pattern is smaller when the module is close to the barcode and larger when it is farther away from the barcode. Smaller barcodes should be read close together. Larger barcodes should be read away from the barcode. To read single or multiple barcodes, hold the scanner module at the proper distance from the target, press the button, and then place the aiming beam or pattern on the barcode. If the barcode being scanned is reflective, it may be necessary to tilt the barcode up 15° to 18° to prevent light reflection.

CHAPTER II DEFAULT SETTINGS

FACTORY DEFAULT SETTINGS

The factory default settings for the device are key scanning and USB keyboard mode output. To apply the default settings to the scanning device, scan the "Load Factory Default Settings" barcode below to reset the barcode scanning device to the factory default settings.



Load Factory Default Settings

CONTINUOUS SCANNING

The device can scan the "Continuous Scanning Mode" barcode to set the scanning mode to continuous scanning, continuous scanning mode does not support scanning the same barcode continuously.



Continuous Scanning Mode

CONTINUOUS SCAN INTERVAL



100Ms Time Interval



200Ms Time Interval



300Ms Time Interval



400Ms Time Interval



500Ms Time Interval



800Ms Time Interval



1000Ms Time Interval



1500Ms Time Interval



2000Ms Time Interval

INDUCTION SCANNING MODE

The device can scan "**Inductive Scanning Mode**" barcode to set the scanning mode to inductive scanning, inductive scanning mode, does not support continuous scanning of the same barcode.



Inductive Scanning Mode

CHAPTER III INTERFACE TYPE

Barcode Scanner Module (B) supports two communication interfaces, USB port and UART serial port.

UART INTERFACE

SETTING UART INTERFACE

To use the UART interface, you need to connect the serial module or connect the UART interface directly. Scan the following setup code to set it as UART output. The default configuration of the UART port is 115200 baud rate, 8 bits of data, no parity bit, 1 bit of stop bit, and carriage return line feed added by default.



UART Port Output

SETTING UART PORT BAUDRATE

The baud rate allows the module to send data from the Barcode Scanner Module (B) to the terminal at the specified rate. In use, the baud rate of the terminal must be set to be the same as the baud rate of the Barcode Scanner Module (B) for proper communication. The default setting is 115200.



300bps



600bps



1200bps



2400bps



4800bps



9600bps



19200bps



38400bps



57600bps



*115200bps

SET UART PORT DATA BITS, STOP BITS AND PARITY

Data bits: 7, 8-bit data bits can be selected for transmission. The terminal must be set to the same data bits as the barcode scanning device in order to communicate properly. Default = 8.

Stop Bit: The stop bit can be set to 1 or 2. The terminal must be set to the same stop bit as the barcode scanning device for proper communication. Default value = 1.

Parity: The method to check the character bit mode, E is even parity, O is odd parity, N is no parity bit, and the terminal must be set to the same parity bit as the scanning device for normal communication. Default = N.



7E1



7N1



7O1



7E2



7N2



7O2



8E1



*8N1



8O1

USB INTERFACE

The USB interface supports configuring as USB PC Keyboard mode, i.e. keyboard mode, or USB virtual serial mode.

USB PC KEYBOARD

Scan the following barcodes to configure the Scan Module to USB PC Keyboard mode. Carriage return and line feed are added by default.



USB PC Keyboard

USB COM

Scanning the barcode below configures the Scan Module to USB COM mode, which emulates a regular RS232-based COM port. Under normal circumstances, the device will be recognized as a USB CDC class device.



USB COM

Note: This mode does not require additional configuration of baud rate, etc.

CHAPTER IV INPUT/OUTPUT SETTINGS

This chapter mainly provides the configuration of buzzer and LED in the power-on, decoding and key-triggered states of the Barcode Scanner Module (B).

POWER-ON TONE SETTING

Power-on tone, that is, the buzzer can beep to prompt the work state after the module is successfully powered on. According to the needs of the scene, can also be configured to no prompt sound. The default setting is that there is a prompt sound after powering on successfully.



No Tone for Successful
Power-on



A Tone for Successful Power-on

TRIGGER DECODING TONE SETTING

After triggering the decoding switch, regardless of whether it is decoded or not, the code scanning setting can send a tone to indicate that the switch has been triggered. The default is no tone for triggering decoding switch.



*No Tone for Triggering
Decoding Switch



A Tone for Triggering
Decoding Switch

TONE SETTING AFTER SUCCESSFUL DECODING

SUCCESSFUL DECODING TONE SWITCH

After successful decoding, the buzzer will make a sound to indicate successful decoding, if no sound is needed, it can be configured as no sound after successful decoding. The default setting is there is a tone after successful decoding.



No Tone for Successful
Decoding



*A Tone for Successful
Decoding

SUCCESSFUL DECODING TONE VOLUME SETTING

Scan the following barcode to change the tone volume after successful decoding. The default is high.



Low



Medium



*High



Turn Off

SUCCESSFUL DECODING TONE FREQUENCY SETTING

Scan the following barcode to modify the tone frequency of the device after successful decoding, the default is medium.



Low (1600Hz)



*Medium (2400Hz)



High (4200Hz)

SUCCESSFUL DECODING TONE DURATION SETTING

Scan the following barcode to modify the tone duration of the device after successful decoding.
The default is normal.



*Normal Beep



Short Beep

SETTING BEEP FREQUENCY FOR DECODING FAILURE

Scan the following barcode to modify the frequency of the device beeping after decoding failure.
The default is Razz.



*Razz (250Hz)



Medium (3250Hz)



High (4200Hz)

READ DELAY

Scan the following barcodes to set the time interval between the device reading one barcode and then reading the next barcode. Default = 750ms.



No Delay



*Short Delay (750ms)



Medium Delay (1000ms)



Long Delay (1500ms)

INTRODUCTION

After the device decodes successfully, a string of data is obtained, which can be numbers, English, symbols, etc., and for 2D codes, it can also be Chinese characters. This string of data is the data information contained in the barcode. In the actual application, you may not only need the data information of the barcode, but also need to know which type of barcode the data information is obtained from, or need to know on which day the barcode information was scanned, or after scanning a barcode, the text of the recorded barcode can be automatically wrapped into a carriage return, which may not be included in the data information of the barcode.

Adding these elements to the barcode is bound to increase the length of the barcode and is not flexible enough. Artificially adding some contents in front of or behind the data information of the barcode, and these added contents can be changed in real time according to the demand, and you can choose to add or mask, which is the prefix and suffix of the barcode data information. By adding the prefix and suffix, that is, to meet the demand and no need to modify the content of barcode information.

- Prefix or suffix characters can be added or removed for one code system or all code systems.
- Add any prefix or suffix using the ASCII conversion table
- Add prefix or suffix characters in the order they appear in the output.
- When configuring a specific code system (or all code systems), adds a prefix or suffix character to the code system corresponding to the serial number of a specific barcode type.
- The maximum size of a prefix or suffix configuration is 200 characters.

ADD PREFIX/SUFFIX

1. Scan a barcode for adding prefix or suffix .
2. Choose the code system to add the prefix or suffix to, and determine the 2-digit hexadecimal value from the [code system chart](#). For example, for Code 11, the barcode type serial number is "h" and the Hex ID is "68".
3. Scan the 2 hex digits in the chart in [the appendix](#) of this manual, or scan 9,9 for all code systems.
4. Determine the hexadecimal value of the prefix/suffix from [the ASCII conversion table](#).
5. Scan the 2-digit hexadecimal value from [the appendix chart](#) in this manual.

6. Repeat steps 4 and 5 for each prefix/suffix character.
7. To add a bar code serial number, scan 5, C, 8, 0. To add the AIM I.D, scan 5, C, 8, 1. To add a backslash (\), scan 5, C, 5, C.
NOTE: To add a backslash (\) in step 7, you must scan 5C twice - once to create the leading backslash, then to create the backslash itself.
8. Scan the "**Save**" barcode to exit and save, or scan the "**Exit**" barcode to exit without saving.
Repeat steps 1-6 to add prefixes or suffixes for other code systems.



Add Prefix



Add Suffix



Save



Exit

EXAMPLE

Adding a suffix for a specific code system

Adds a CR (carriage return) suffix to Code 128. Step:

1. Scan the "Add Suffix" barcode.
2. Determine the 2-digit hexadecimal value of Code 128 from [the code system chart](#): 6A.
3. Scan the "6", "A" barcode from [the appendix chart](#) in this manual.
4. Determine the hexadecimal value of the carriage return suffix from [the ASCII conversion table](#): 0D.
5. Scan the "0", "D" barcode from the chart in [the appendix](#) of this manual.
6. Scan the "**Save**" barcode, or scan the "**Exit**" barcode to exit without saving.



Add Suffix



A



D



6



0



Save

ADD CARRIAGE RETURN SUFFIX TO ALL CODE SYSTEMS

To add a carriage return suffix to all code systems, scan the barcode below. This operation first clears all current suffixes and then adds a carriage return suffix to all code systems.



Add Carriage Return Suffix to
All Code Systems

ADD A LINE FEED SUFFIX TO ALL CODE SYSTEMS

To add a carriage return newline suffix to all code systems, scan the barcode below. This operation first clears all current suffixes and then adds a carriage return suffix to all code systems.



Add Newline Suffixes to All Code
Systems

ADD A CARRIAGE RETURN SUFFIX TO ALL CODE SYSTEMS

To add a carriage return suffix to all code systems, scan the barcode below. This operation first clears all current suffixes and then adds a carriage return suffix to all code systems.



Add Carriage Return Line Feed Suffix
to All Code systems.

KEYBOARD OPERATION

When decoding the output, you can configure the keyboard to perform different operations, such as performing automatic saving after decoding the output.

1. Determine [Keyboard operation ASCII conversion](#) the 2-digit hexadecimal value corresponding to the keyboard operation to be performed, and determine the 2-digit hexadecimal value of the code system to be set.
2. First, scan the barcode of "**Start Adding Keyboard**".
3. Then determine the sequence of keyboard operation and barcode output. If you add the keyboard first, scan the "**Add Prefix**" barcode, and then scan the "**Add Suffix**" barcode.
4. Scan the corresponding 4-digit hexadecimal value (including code system and corresponding keyboard operation) in [the appendix chart](#) of this manual according to the corresponding value.
5. Scan the "**Save**" barcode.
6. Scan "**End Up Adding Keyboard**".



Start Adding Keyboard



End up Adding Keyboard

Example: Save after adding decoded output for all code systems.

First, confirm the operation to be performed: save the barcode after it is output, that is, add a suffix to the output bar code. Then, determine the corresponding hexadecimal values according to the

table in the appendix. All code systems correspond to "9" and "9", and the saving operation corresponds to "1" and "3".

After confirming, scan "Start Adding Keyboard" barcode, "Add Suffix" barcode, "9" in turn, "9", "1", "3", and finally scan "Save" the barcode.

(where "9" and "9" correspond to all coding systems, and "1" and "3" correspond to saving after decoding the output.)

PREFIX/SUFFIX CLEARING

The prefix/suffix of a code system can be cleared. If a prefix/suffix of one code system has been added, you can scan the barcode "Clear prefix/suffix of one code system" to delete all prefix/suffix characters from this code system. Scanning "Clear prefixes/suffix of all code system" will delete all code prefixes/suffixes.

1. Scan the barcode "Clear the prefix of one code system" or "Clear the suffix of one code system".
2. Determine the 2-digit hexadecimal value of the prefix/suffix code system to be cleared from [the appendix code system chart](#).
3. Scan the 2-digit hexadecimal value in [the appendix chart](#) of this manual; For example, scan "9", and the "9" barcode is applied to all coding systems.
4. Scan the "Save" barcode.



Clear the Prefix of a Code
System



Clear the Suffix of a Code
System



Save

PREFIX SELECTION



Add Prefix



Clear the Prefix of a Code
System

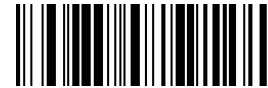


Clear the Prefix of All Code
System

SUFFIX SELECTION



Add Suffix



Clear the Suffix of a Code
System



Clear the Suffix of All Code
System

FUNCTION CODE TRANSMISSION

When the function code transmission is enabled and the scanned data contains the function code, the barcode scanning device will transmit the function code data to the terminal. Enabled by default.



* Enable



Disable

BARCODE DELAY TRANSMISSION

A delay of up to 5000ms (in increments of 5ms) can be set each time the barcode is transmitted. Scan the following barcode, then scan the number [Appendix chart](#) of 5ms delays in this manual, and then scan the "**Save**" barcode.



Barcode Delay

To eliminate the delay of barcode transmission, please scan the "**Barcode Delay**" barcode and set the delay number to 0. Use the chart in the appendix of this manual, and then scan the "**Save**" barcode.

Example: Set a delay of 100ms for barcode transmission:

First scan "**Barcode Delay**", then scan the appendix chart "**2**" and "**0**" ($100/5 = 20$), and then scan "**Save**" the barcode to set the transmission barcode delay of 100ms.

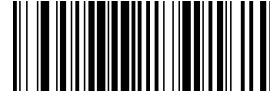
CHAPTER VI CODE SYSTEM

ALL CODE SYSTEM

If the barcode scanning device needs to solve all code systems, please scan the "**All code systems on**" barcode. For specific code system only, scan the "**All code system off**" barcode and then scan



All Code Systems On



All Code Systems Off

the "**All code systems on**" barcode for that specific code system.

NOTE: The 2D ZIP Code is not turned on by default when the "**All code systems on**" barcode is scanned. The 2D ZIP Code must be turned on separately.

Code Reading Length Description

If the scanned barcode data length does not match the valid reading length, the device will sound an error tone. Setting the same value for the minimum and maximum length will force the device to read a fixed length barcode. This helps to reduce misreading.

For example, only barcodes with a barcode length of 6-10 characters can be solved. The minimum length =06, and the maximum length =10.

1. Select the code system to set the maximum and minimum reading length, scan the "**Minimum Barcode Length**" barcode under its directory, and scan the number "**6**" barcode and "**Save**" barcode from the appendix chart.
2. Scan the "**Maximum Barcode Length**" barcode, and scan the numbers "**1**", "**0**" and "**Save**" barcodes from the appendix chart.

The above steps will set the maximum reading length of the selected code system to be 10 and the minimum reading length to be 6.

CODABAR



All Default Codabar Settings

ON/OFF



* On



Off

START/STOP CHARACTER

The "Start/Stop" character output is at the front and rear of the barcode. It can be configured to "start/stop" characters for transmission or no transmission. The default is no transmission.



Transmit



* Not Transmit

CHECK CHARACTER

No check character means that the device will read and transmit all barcodes whether there is a check character or not. (At this time, when scanning the barcode with check characters, the check characters are transmitted together.)

When "Check Character" is set to "**Enable without check character transmission**", the device will check according to the last digit data of the barcode. If the check passes, normal data except the last check character will be transmitted. If the check fails, the barcode content will not be sent.

When "Check Character" is set to "**Enable with check character transmission**", the device will check according to the last digit data of the barcode. If the check passes, the check character will be transmitted as the last digit of normal data. If the check fails, the barcode content will not be sent.



* No check character



Enable without check
character transmission



Enable with check character
transmission

CASCADE

Codabar supports bar code cascade. When cascading is enabled, the device looks for a Codabar barcode with a "d" start character, which is adjacent to a barcode with a "d" stop character. In this



case, two barcodes are connected into one, and all "D" characters are omitted. Scan the "need" barcode to prevent the device from decoding a single "D" Codabar barcode without the adjacent "D" start character. This option has no effect on Codabar without the stop/start D characters.



On



Required



* Off

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 2-60. Minimum default value =4, and maximum default value =60. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length).



Minimum Barcode Length



Maximum Barcode Length



Default Code 39
Configuration

ON/OFF



*On



Off

START/STOP CHARACTER

"The Start/Stop character is located at the front and end of the barcode. The Start/Stop character can be configured to be transmitted or not transmitted. The default is no transmission.



Transmit



* Not Transmit

CHECK CHARACTER

No check character means that the device will read and transmit all barcodes whether there is a check character or not. (At this time, when scanning the barcode with check characters, the check characters are transmitted together.)

When "Check Character" is set to "**Enable Without Check Character Transmission**", the device will check according to the last digit data of the barcode. If the check passes, normal data except the last check character will be transmitted. If the check fails, the barcode content will not be sent.

When "Check Character" is set to "Enable with check character transmission", the device will check according to the last digit data of the barcode. If the check passes, the check character will be transmitted as the last digit of normal data. If the check fails, the barcode content will not be sent.



* No Check Character



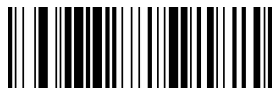
Enabled Without Check
Characters Transmission



Enable With Check Characters
Transmission

BARCODE READING LENGTH

Scan the following bar code to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 0-48. Minimum default value =0 and maximum default value =48. (Note: After scanning "Minimum Barcode Length" and "Maximum Barcode Length", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

CODE 32 PARMACEUTICAL (PARAF)

Code 32 Pharmaceutical is a form of Code 39 barcode used in Italian pharmacies. When configuring code32, you need to open code39 before configuring it.

This coding system is also called PARAF.



On



* Off

FULL ASCII

If FULL ASCII Code39 decoding is enabled, some characters in the barcode will be decoded into a single character.

For example, \$V will be decoded as ASCII character SYN, and /C will be decoded as ASCII character #. The default setting is off.

NUL%U	DLE \$P	SP SPACE	0 /P	@ %V	P P	%W	p +P
SOH\$A	DC1 \$Q	! /A	1 /Q	A A	Q Q	a +A	q +Q
STX \$B	DC2 \$R	" /B	2 /R	B B	R R	b +B	r +R
ETX \$C	DC3 \$S	# /C	3 /S	C C	S S	c +C	s +S
EOT \$D	DC4 \$T	\$ /D	4 /T	D D	T T	d +D	t +T
ENQ \$E	NAK \$U	% /E	5 /U	E E	U U	e +E	u +U
ACK \$F	SYN \$V	& /F	6 /V	F F	V V	f +F	v +V
BEL \$G	ETB \$W	' /G	7 /W	G G	W W	g +G	w +W
BS \$H	CAN \$X	(/H	8 /X	H H	X X	h +H	x +X
HT \$I	EM \$Y	) /I	9 /Y	I I	Y Y	i +I	y +Y
LF \$J	SUB \$Z	* /J	:/Z	J J	Z Z	j +J	z +Z
VT \$K	ESC %	+ /K	; %F	K K	[%K	k +K	{ %P
FF \$L	FS %B	, /L	< %G	L L	\ %L	l +L	| %Q
CR \$M	GS %C	- /M	= %H	M M	] %M	m +M	} %R
SO \$N	RS %D	. /N	> %I	N N	^ %N	n +N	~ %S
SI \$O	US %E	/O	? %J	O O	_ %O	o +O	DEL %T

Character pairs /M and /N are decoded as a minus sign and a period, respectively. Character pairs /P through /Y are decoded as 0 through 9.



FULL ASCII On



*FULL ASCII Off

INTERLEAVED 2 OF 5



Default All Interleaved2 of 5 Settings

ON/OFF



*On



Off

CHECK CHARACTER

No check character means the device will read and transmit all barcodes with or without check characters. (When barcode with check character is scanned at this time, check character is transmitted together.)

When "Checksum character" is set to "**Enable Without Check Character Transmission**", the barcode scanning device will check the barcode according to the last bit of data, if the check passes, the normal data except the last check character will be transmitted, and if the check fails, the barcode content will not be sent. The barcode content will not be sent if the verification passes.

When "Check Character" is set to "**Enable With Check Character Transmission**", the barcode scanning equipment will check the last bit of the barcode data, and if the check passes, the check character will be transmitted as the last bit of the normal data, and if the check fails, the barcode content will not be sent. The content of the barcode will not be sent if the verification is passed.



*No Check Character



Enable Without Check
Character Transmission



Enable With Check Character
Transmission

BARCODE READING LENGTH

Scan the following barcodes to change the reading length. For additional information, see the Read Length instructions. The minimum and maximum lengths are 2-80. The minimum default = 4 and the maximum default = 80. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum**

Barcode Length", you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

NEC 2 OF 5



All Default NEC 2 of 5

Settings

ON/OFF



*On



Off

CHECK CHARACTER

No check character means the device will read and transmit all barcodes with or without check characters. (When barcode with check character is scanned at this time, check character is transmitted together.)

When "Check character" is set to "**Enable without check character transmission**", the device will check the barcode according to the last bit of data, if the check passes, the normal data except the last checksum character will be transmitted, and if the check fails, the barcode content will not be sent.

When "Check Character" is set to "Enable with check character transmission", the device will check according to the last digit data of the barcode. If the check passes, the check character will be transmitted as the last digit of normal data. If the check fails, the barcode content will not be sent.



* No Check Character



Enabled Without Check
Characters Transmission



Enable with Check Characters
Transmission

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 2-80. Minimum default value =4, and maximum default value =80. (Note: After scanning "Minimum Barcode Length" and "Maximum Barcode Length", you need to scan the specified barcode length and save the barcode. Please refer to the Barcode Reading Length instruction.)



Minimum Barcode Length



Maximum Barcode Length

CODE 93



All Default Code 93 Settings

ON/OFF



* On



Off

BARCODE READING LENGTH

Scan the barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 0-80. Minimum default value =0 and maximum default value =80. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the Barcode Reading Length instruction.)



Minimum Barcode Length



Maximum Barcode Length

STRAIGHT 2 OF 5 INDUSTRIAL (THREE-BAR START/STOP)



All Default STRAIGHT 2 of 5 INDUSTRIAL Settings

ON/OFF



* On



* Off

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-48. Minimum default value =4, and maximum default value =48. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the Barcode Reading Length instruction.)



Minimum Barcode Length



Maximum Barcode Length

STRAIGHT 2 OF 5 IATA (TWO-BAR START/STOP)



All Default Straight 2 of 5 IATA
Setting

ON/OFF



On



*Off

BARCODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, see the Read Length instructions. The minimum and maximum lengths are 1-48. The minimum default value = 4 and the maximum default value = 48. (Note: After scanning the “**Minimum Barcode Length**” and “**Maximum Barcode Length**”, you will also need to scan the specified barcode length and save the barcode, see the Barcode Reading Length instructions.)



Minimum Barcode Length



Maximum Barcode Length



All Default Matrix 2 of 5

Settings

ON/OFF



On



*Off

BARCODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, see the Read Length instructions. The minimum and maximum lengths are 1-80. The minimum default value = 4 and the maximum default value = 80. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

PARITY BIT

This option sets the checksum function for matrix25 codes to be turned on and off.



Parity On



*Parity Off

CODE 11



All Default Code 11 Settings

ON/OFF



On



*Off

PARITY BIT

This option sets 1 or 2 check bits of the Code 11 barcode. The default is two parity bits.



One Parity Bit



Two Parity Bits

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-80. The minimum default value = 4 and the maximum default value = 80. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you also need to scan the specified barcode length and save the barcode, please refer to the description of reading length.)



Minimum Barcode Length



Maximum Barcode Length

CODE 128



All Default Code 128 Settings

ON/OFF



*On



Off

ISBT 128 CASCADE



Enable ISBT 128



*Disable ISBT 128

BARCODE READING LENGTH

Scan the following barcodes to change the reading length. For additional information, see the Barcode Reading Length instructions. The minimum and maximum lengths are 0-80. The minimum default value = 0 and the maximum default value = 80. (Note: After scanning the “**Minimum Barcode Length**” and “**Maximum Barcode Length**”, you will also need to scan the specified barcode length and save the barcode, see the Barcode Reading Length instructions.)



Minimum Barcode Length



*Maximum Barcode Length

GS1-128



All Default GS1-128 Settings

ON/OFF



*On



Off

CODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, refer to the Code Reading Length instructions. The minimum and maximum lengths are 1-80. The minimum default value = 1 and the maximum default value = 80. (Note: After scanning the "**Minimum barcode length**" and "**Maximum barcode length**", you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

UPC-A



All Default UPC-A Settings

ON/OFF



*On



Off

PARITY BIT

The following configures whether the parity bit should be transmitted at the end of the scan data.
Default = On.



*On



Off

DIGITAL SYSTEM

The digital system characters of U.P.C are usually transmitted at the beginning of scanning data,
and the default is ON.



* On



Off

ADDITIONAL CODE

This setting adds two or five additional codes at the end of all scanned UPC-A data. Default =2/5
digit additional code off.



2-digit Additional Code On



*2-digit Additional Code Off



5-digit Additional Code On



*5-digit Additional Code Off

NECESSARY ADDITIONAL CODE

When scanning "**Required**", the device will only read UPC-A barcode with additional code. Then, you must enable the additional code of 2 or 5 digits. The default is not required.



Required



* Not Required

ADDITIONAL CODE SEPARATOR

When this function is turned on, there will be a space between the barcode and the additional code. When closed, there is no space separation. The default is on.



*On



Off

Note:

UPC-A can be converted into ENA13 by the following configuration code.



Not Turn



Turn

UPC-E0



All Default UPC-E Settings

ON/OFF

Most U.P.C barcodes are headed by the 0-digit system. To read these barcodes, please scan the barcode "***UPC-E0 On**". If you need to read the bar code using the 1-digit system, please scan "**UPC-E1 On**". Default =UPC-E0 ON.



*UPC-E0 On



UPC-E0 Off

BAR CODE EXTENSION

UPC-E Expand expands UPC-e barcode to 12-bit UPC-A format. Default = Off.



On



* Off

NECESSARY ADDITIONAL CODE

When scanning "**Required**", the barcode scanning device will only read UPC-E barcodes with additional codes. Default = Not required.



*Required



*Not Required

ADDITIONAL CODE SEPARATOR

When this feature is on, there is a space separating the barcode from the additional code. When off, there is no space separation. Default = On.



*On



Off

PARITY

The following configures whether the checksum bit should be transmitted at the end of the scanned data. Default = On.



* On



Off

DIGITAL SYSTEM

The digital system characters of U.P.C are usually transmitted at the beginning of scanned data. Default = On.



* On



Off

ADDITIONAL CODE

This setting adds 2/5 bits of additional code at the end of all scanned UPC-E data. Default = 2/5 digit additional code off.



2-digit Additional Code On



*2-digit Additional Code Off



5-digit Additional Code On



*5-digit Additional Code Off

UPC-E1

Most U.P.C barcodes are headed by the 0-digit system. To read these barcodes, please scan the barcode "***UPC-E0 On**". If you need to read the bar code using the 1-digit system, please scan "**UPC-E1 On**". Default = UPC-E1 off.



UPC-E1 On



*UPC-E1 Off

EAN/JAN-13



All Default EAN/JAN Settings.

ON/OFF

Note: If you want to convert UPC-A barcode to EAN-13 format, please scan UPC-A to close the barcode.



* On



* Off

PARITY BIT

Whether the following configuration should transmit the check bit at the end of the scanned data.
Default = On.



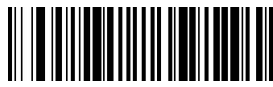
*On



Off

ADDITIONAL CODE

This setting adds 2/5 bits of additional code at the end of all scanned EAN/JAN-13 data. Default = 2/5 digit additional code off.



2-digit Additional Code On



*2-digit Additional Code Off



5-digit Additional Code On



*5-digit Additional Code Off

NECESSARY ADDITIONAL CODE

When "Required" is scanned, the barcode scanning device will only read EAN/JAN-13 barcodes with an additional code. Default = not required.



Required



*Not Required

ADDITIONAL CODE SEPARATOR

When this feature is on, there will be a space separating the barcode from the additional code. When off, there is no space separation. Default = On.



*On



Off

ISBN TRANSLATE

When set to ISBN symbol transfer, EAN-13 Bookland symbols are converted to the equivalent ISBN symbol format. Default = off.



On



*Off

EAN/JAN-8

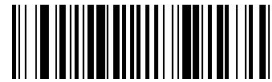


All Default EAN/JAN-8
Settings

ON/OFF



*On



Off

CHECKSUM CHARACTER

The following configures whether the checksum character should be transmitted at the end of the scan data. Default = on.



*On



Off

ADDITIONAL CODE

This setting adds a 2/5-bit append code to the end of all scanned EAN/JAN-13 data. Default = 2/5 digit Append Code Off.



2-digit Append Code On



*2-digit Append Code Off



5-digit Add-on Code On



*5-digit Add-on Code Off

REQUIRED ADDITIONAL CODE

When "Required" is scanned, the device will only read EAN/JAN-8 barcodes with an additional code. Default = not required.



Required



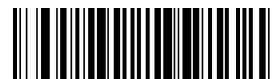
*Not Required

APPEND CODE SEPARATOR

When this feature is on, there will be a space separating the barcode from the append code. When off, there is no space separation. Default = on.



*On



Off

MSI



All Default MSI Settings

ON/OFF



On



*Off

CHECK CHARACTERS

MSI barcodes use different types of checksum characters. You can configure the device to read MSI barcodes using checksum characters. Default = enable MOD10, but no transmission.

When "Check Character" is set to "**Enable MOD10 and Transmit**", the device will only read and use MSI barcodes printed with the specified type of check characters, and will transmit characters at the end of the scanned data.

When "Check Character" is set to "**Enable MOD10, No Transmission**", the device will only read and use the MSI barcode printed with the specified type of check character, but will not transmit the scanned check character.



* MOD10 Enabled, No
Transmission



MOD10 Enabled and
Transmit



Disable MSI Check
Characters

CODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 4-48. Minimum default value =4, and maximum default value =48. (Note: After scanning "**Minimum Barcode Length**" and

"Maximum Barcode Length", you also need to scan the specified barcode length and save the barcode, please refer to the description of reading length.)



Minimum Barcode Length



Maximum Barcode Length

GS1 DATABAR OMNIDIRECTIONAL



All Default GS1 DataBar Omnidirectional
Settings

ON/OFF



*On



Off

GS1 DATABAR LIMITED



All Default GS1 DataBar Limited
Settings

ON/OFF



*On



Off

GS1 DATABAR EXPANDED



All Default Settings

ON/OFF



*On



Off

READING LENGTH

Scan the following barcodes to change the reading length. For additional information, refer to the Read Length instructions. The minimum and maximum lengths are 4 to 74. The minimum default value = 4 and the maximum default value = 74. (Note: After scanning the “**Minimum Barcode Length**” and “**Maximum Barcode Lengths**”, you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

PDF417



All Default PDF417 Settings

ON/OFF



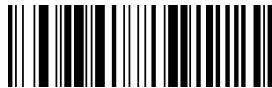
*On



Off

BARCODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, refer to the Read Length instructions. The minimum and maximum length is 1-2750. Minimum default value =1 and maximum default value =2750. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

QR CODE



All Default QR Code Settings

ON/OFF

This configuration applies to QR codes and Micro QR codes.



* On



Off

CODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-7089. Minimum default value =1, maximum default value =7089. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

DATA MATRIX



All Default Data Matrix
settings.

ON/OFF



*On



Off

CODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-3116. Minimum default value =1, and maximum default value =3116. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

AZTEC CODE



All Default Aztec Code

Settings

ON/OFF



*On



Off

BARCODE READING LENGTH

Scan the following barcodes to change the reading length. For additional information, see the Barcode Read Length instructions. The minimum and maximum lengths are 1-3832. The minimum default value = 1 and the maximum default value = 3832. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum Barcode Length**" you also need to scan the specified barcode length and save the barcode, refer to the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

CHINA POST (HONG KONG 2 OF 5)



All Default China Post (Hong Kong 2 of 5)

Settings

ON/OFF



On



*Off

BARCODE READ LENGTH

Scan the barcode below to change the reading length. For additional information, see the Barcode Reading Length instructions. The minimum and maximum lengths are 2-80. The minimum default value = 4 and the maximum default value = 80. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

KOREA POST



All Default Settings

ON/OFF



On



*Off

BARCODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, see the Read Length instructions. The minimum and maximum length is 2-80. Minimum default value =4, and maximum default value =48. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

CHECK BIT

Scan the bar code below to determine whether the check bit should be transmitted at the end of the scanned data. The default is off.



On



* Off

HAN XIN CODE



All Default Han Xin Settings

ON/OFF



On



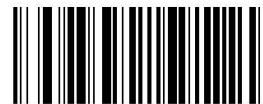
* Off

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-1000. Minimum default value =1 and maximum default value =1000. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

MAXI CODE



All Default MAXI Code

Settings

ON/OFF



On



Off

BARCODE READING LENGTH

Scan the following barcode to change the barcode reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-150. Minimum default value =1 and maximum default value =150. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

MICROPDF



All Default microPDF Settings

ON/OFF



On



Off

BARCODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum lengths are 1-366. The minimum default value = 1 and the maximum default value = 366. (Note: After scanning the Minimum and

Maximum barcode lengths, you will also need to scan the specified barcode length and save the barcode, see the Read Length instructions.)



Minimum Barcode Length



Maximum Barcode Length

GS1 COMPOSITE CODES



All Default Composites
Settings

ON/OFF



On



Off

BARCODE READING LENGTH

Scan the following barcodes to change the reading length. For additional information, see the Read Length instructions. The minimum and maximum lengths are from 1 to 2435. The minimum default value = 1 and the maximum default value = 2435. (Note: After scanning the "**Minimum Barcode Length**" and "**Maximum Barcode Length**" you also need to scan the specified barcode length and save the barcode, refer to the Barcode Reading Length instructions.)



Minimum barcode length



Maximum barcode length

CODABLOCK A



All Default Codablock A
Settings

ON/OFF



On



Off

BARCODE READING LENGTH

Scan the following barcodes to change the read length. For additional information, see the Read Length instructions. The minimum and maximum lengths are 1-600. The minimum default value = 1 and the maximum default value = 600. (Note: After scanning the “**Minimum barcode length**” and “**Maximum barcode length**”, you will also need to scan the specified barcode length and save the barcode, see the Code Reading Length instructions.)



Minimum barcode length



Maximum barcode length

CODABLOCK F



All Default Codablock F Settings.

ON/OFF



On



Off

CODE READING LENGTH

Scan the following barcode to change the reading length. For additional information, please refer to the code length description. The minimum and maximum length is 1-2048. Minimum default value =1, maximum default value =2048. (Note: After scanning "**Minimum Barcode Length**" and "**Maximum Barcode Length**", you need to scan the specified barcode length and save the barcode. Please refer to the description of barcode length.)



Minimum Barcode Length



Maximum Barcode Length

APPENDIX 1 REFERENCE CHART

1D CODE SYSTEM

Symbology	AIM		Newtologic	
	ID	Possible Modifiers (m)	ID	HEX
All symbologies				99
Codabar	]Fm	0-1	a	61
Code 11	]H3		h	68
Code 128	]Cm	0, 1, 2, 4	j	6A
Code 32 Pharmaceutical (PARAF)	]X0		<	3C
Code 39 (supports Full ASCII mode)	Am	0, 1, 3, 4, 5,7	b	62
TCIF Linked Code 39 (TLC39)	L2		T	54
Code 93 and 93i	Gm	0-9, A-Z, a-m	i	69
EAN	Em	0, 1, 3, 4	d	64
EAN-13 (including Bookland EAN)	]E0		d	64
EAN-13 with Add-On	]E3		d	64
EAN-13 with Extended Coupon Code	]E3		d	64
EAN-8	]E4		D	44
EAN-8 with Add-On	]E3		D	44
GS1				
GS1 DataBar	em	0	y	79
GS1 DataBar Limited	]em		{	7B
GS1 DataBar Expanded	]em		}	7D
GS1-128	]C1		l	49
2 of 5				
China Post (Hong Kong 2 of 5)	]X0		Q	51
Interleaved 2 of 5	]Im	0, 1, 3	e	65
Matrix 2 of 5	]X0		m	6D
NEC 2 of 5	]X0		Y	59
Straight 2 of 5 IATA	]Rm	0, 1, 3	f	66
Straight 2 of 5 Industrial	]S0		f	66
MSI	]Mm	0, 1	g	67
Telepen	]Bm		t	74
UPC		0, 1, 2, 3, 8, 9, A, B, C		
UPC-A	]E0		c	63
UPC-A with Add-On	]E3		c	63

UPC-A with Extended Coupon Code	]E3		c	63
UPC-E	]E0		E	45
UPC-E with Add-On	]E3		E	45
UPC-E1	]X0		E	45
Add Newtologic Code ID				5C 80
Add AIM Code ID				5C 81
Add Backslash				5C 5C
Batch Mode Quantity			5	35

2D CODE SYSTEM

Symbology	AIM		Newtologic	
	ID	Possible Modifiers (m)	ID	HEX
All Symbologies				99
Aztec Code	Aztec Code]zm	0-9, A-C	z	7A
Chinese Sensible Code (Han Xin Code)	]X0		H	48
Codablock A	]O6	0, 1, 4, 5, 6	V	56
Codablock F	]Om	0, 1, 4, 5, 6	q	71
Code 49	]Tm	0, 1, 2, 4	l	6C
Data Matrix	]dm	0-6	w	77
GS1	]em	0-3	y	79
GS1 Composite	]em	0-3	y	79
GS1 DataBar Omnidirectional	]em	0-3	y	79
MaxiCode	]Um	0-3	x	78
PDF417	]Lm	0-2	r	72
MicroPDF417	Lm	0-5	R	52
QR Code	]Qm	0-6	s	73
Micro QR Code	Qm		s	73

POSTCODE

Symbology	AIM		Newtologic	
	ID	Possible Modifiers (m)	ID	Hex
All Symbologies				99
Australian Post	X0		A	41
British Post	]X0		B	42
Canadian Post	X0		C	43
China Post	X0		Q	51
InfoMail	X0		,	2c
Intelligent Mail Bar Code	X0		M	4D
Japanese Post	]X0		J	4A
KIX (Netherlands) Post	]X0		K	4B
Korea Post	]X0		?	3F
Planet Code	]X0		L	4C
Postal-4i	]X0		N	4E
Postnet	]X0		P	50

ASCII CONVERSION TABLE

Hex	Decimal	Character
00	0	NUL (Null char.)
01	1	SOH (Start of Header)
02	2	STX (Start of Text)
03	3	ETX (End of Text)
04	4	EOT (End of Transmission)
05	5	ENQ (Enquiry)
06	6	ACK (Acknowledgment)
07	7	BEL (Bell)
08	8	BS (Backspace)
09	9	HT (Horizontal Tab)
0a	10	LF (Line Feed)
0b	11	VT (Vertical Tab)
0c	12	FF (Form Feed)
0d	13	CR (Carriage Return)
0e	14	SO (Shift Out)
0f	15	SI (Shift In)
10	16	DLE (Data Link Escape)

11	17	DC1 (XON) (Device Control 1)
12	18	DC2 (Device Control 2)
13	19	DC3 (XOFF) (Device Control 3)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgment)
16	22	SYN (Synchronous Idle)
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1a	26	SUB (Substitute)
1b	27	ESC (Escape)
1c	28	FS (File Separator)
1d	29	GS (Group Separator)
1e	30	RS (Request to Send)
1f	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	\$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)
27	39	` (Single Quote)
28	40	((Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2a	42	* (Asterisk)
2b	43	+ (Plus)
2c	44	, (Comma)
2d	45	- (Minus / Dash)
2e	46	. (Dot)
2f	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	: (Colon)
3b	59	; (Semi-colon)
3c	60	< (Less Than)
3d	61	= (Equal Sign)
3e	62	> (Greater Than)

3f	63	? (Question Mark)
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
4f	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5a	90	Z
5b	91	[(Left / Opening Bracket)
5c	92	\ (Back Slash)
5d	93	] (Right / Closing Bracket)
5e	94	^ (Caret / Circumflex)
5f	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
6a	106	j
6b	107	k

6c	108	|
6d	109	m
6e	110	n
6f	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7a	122	z
7b	123	{ (Left/ Opening Brace)
7c	124	| (Vertical Bar)
7d	125	} (Right/Closing Brace)
7e	126	~ (Tilde)
7f	127	DEL (Delete)

APPENDIX 2 CHART

NUMERICAL TABLE

Note: If there is an error when scanning letters or numbers (before scanning the “Save” barcode), please scan the “Exit” barcode, rescan the correct letters or numbers, and then scan the “Save” barcode.



0



1



2



3



4



5



6



7



8



9



A



B



C



D



E



F



Save



Exit

KEYBOARD OPERATION ASCII CONVERSION

HEX	Decimal	CTRL+X	Description	
00	0	CTRL+@		
01	1	CTRL+A	check all	
02	2	CTRL+B	boldface	
03	3	CTRL+C	Copy	
04	4	CTRL+D	Font formatting	
05	5	CTRL+E	Center Alignment	
06	6	CTRL+F	Find	
07	7	CTRL+G	Positioning	
08	8	CTRL+H	Replace	
0a	10	CTRL+J	Align both ends	
0b	11	CTRL+K	Hyperlink	
0c	12	CTRL+L	Left Alignment	
0d	13	CTRL+M	Left indent	
0e	14	CTRL+N	Create	
0f	15	CTRL+O	Open	
10	16	CTRL+P	Print	
11	17	CTRL+Q		
12	18	CTRL+R	right alignment	
13	19	CTRL+S	save	
14	20	CTRL+T	First line indent	
15	21	CTRL+U	underline	F12
16	22	CTRL+V	paste	F1
17	23	CTRL+W	Write disk off	F2
18	24	CTRL+X	Cut	F3
19	25	CTRL+Y	Repeat	F4
1a	26	CTRL+Z	Undo	F5
1b	27	CTRL+[		F6

1c	28	CTRL+\		F7
1d	29	CTRL+]		F8
1e	30	CTRL+^		F9
1f	31	CTRL+-		F10
7f	32	CTRL+		