

User Guide

For RT830D & RT860D



technology

RTscan

Precautions

Please read the manual carefully before using the product, and read the following notes carefully to ensure the safe use of the barcode scanner. Please keep the instructions for the future at any time to check.

1. All software (including firmware) provided to users with barcode scanning equipment is subject to software copyright and protection of the right.
2. Manufacturer retains the right to change the software (including firmware).
3. The contents of this manual are subject to change without notice.
4. The manufacturer is not responsible for any loss or claim arising out of the use of this manual by a third party.
5. Do not throw or squeeze a barcode scanner.
6. Only use your fingers or blunt objects to operate the switch buttons. Using a pointed object can damage the keys and cause a short circuit in the inner circuit.
7. A sudden change in temperature may result in frosting on the barcode scanning window. If you run the barcode scanner at this time, it may affect normal operation. If condensing frosting occurs, wait until it is completely dry before using the barcode scanner.

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Preface

Brief Introduction

This manual provides detailed instructions for setting up and using the Scanner .

Chapter Outline

Chapter 1 Connections and Basic Settings :introduces the method and default settings for bar code scanning devices

Chapter 2 Interface Types : Describes the main configuration of interface types

Chapter 3 Input / Output Settings: Describes Configuration Decoding Success / Failed LED and Buzzer Response

Chapter 4 Data Editing Describes :How to Add Prefix / Suffix

Chapter 5 Code System :Introduces All Code Systems and Configurations Supported by Barcode Scanning Equipment

Chapter 6 Universal Features :provides software version display and factory default configuration codes

Chapter 7 Common Problems and Solutions: List Common Problems and Solutions

Chapter 8 Equipment Maintenance and Customer Service :Introduces Equipment Maintenance and Customer Support Information

Appendix: provides commonly used code charts, etc.

Chapter 1 Connection and Basic Settings

Introduction

The RT830D & RT860D barcode scanner supports USB and RS232 interface (optional). Please follow the appropriate connection procedure to connect the barcode scanner.

Device Connection

USB interface on the host



RS232 interface on the host



USB Connection

The barcode scanner can be connected to the USB port of your computer.

1. Connect the cable with the scanner.
2. Connect the USB port to the host.
3. The barcode scanner will beep.
4. Verify the operation by scanning the [Sample Symbols](#).

RS232 Connection

1. Connect the cable with the scanner.
2. Connect the RS-232 interface to the host.
3. The barcode scanner will beep.
4. Verify the operation by scanning the [Sample Symbols](#).

The interface is configured for 115,200 baud, 8 data bits, no parity and 1 stop bit.

Defaults Setting

Factory Default Setting

Scan the "Load Factory Defaults" barcode below to reset the barcode scanner to the factory default settings.



(800006.)

Load Factory Defaults

Chapter 2 Interface Type

Introduction

This chapter introduces the USB and RS232 interface types and lists their related configurations.

RS232

Connect RS232 interface, you need to scan the "**RS232**" barcode, the serial port related configuration is: 115200 baud rate, 8 data bits, no parity, 1 stop bit, add carriage return and line feed by default.



RS232 Baud Rate

Baud Rate sends the data from the scanner to the terminal at the specified rate. The host terminal must be set for the same baud rate as the scanner. Default = 115200.



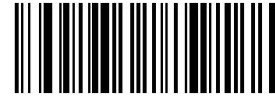
(8310030.)
300



(8310031.)
600



(8310032.)
1200



(8310033.)
2400



(8310034.)
4800



(8310035.)
9600



(8310036.)
19200



(8310037.)
38400



(8310038.)
57,600



(8310039.)
*115,200

RS232 Word Length: Data Bits, Stop Bits, and Parity

Data Bits You can choose to transfer 7,8-bit data bits, and you must set the terminal to the same data bit as the barcode scanner to communicate properly. Default = 8.

Stop Bits sets the stop bits at 1 or 2. Default = 1.

Parity provides a means of checking character bit patterns for validity.

Default = None.



(8310063.)
7 Data, 1 Stop, Parity Even



(8310060.)
7 Data, 1 Stop, Parity None



(8310066.)
7 Data, 1 Stop, Parity Odd



(8310064.)
7 Data, 2 Stop, Parity Even



(8310061.)
7 Data, 2 Stop Parity None



(8310067.)
7 Data, 2 Stop, Parity Odd



(8310065.)
8 Data, 1 Stop, Parity Even



(8310062.)
* 8 Data, 1 Stop, Parity None



(8310068.)
8 Data, 1 Stop, Parity Odd

USB

USB CDC (COM Port simulation)

Scan the following code to program the scanner to emulate a regular RS232- based COM Port.



(881001133.)

USB CDC

Note: No extra configuration (e.g., baud rate) is necessary.

USB-HID Keyboard simulation

Scan the following code to program the scanner and the scanner will be simulated as USB keyboard input. The Host receives keystrokes on the virtual keyboard. It works on a Plug and Play basis and no driver is required.



(881001124.)

USB Keyboard simulation (PC)

USB Country Keyboard Types

Keyboard layouts vary from country to country. Scan the following corresponding national keyboard configuration codes to make sure correct output.

USA



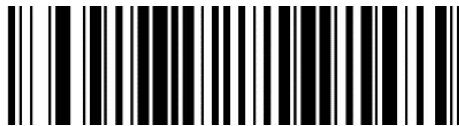
(8210010.)

SPAIN



(82100110.)

GERMANY



(8210014.)

DENMARK



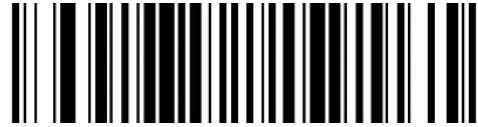
(8210018.)

ICELAND



(82100175.)

FINLAND



(8210012.)

FRANCE



(8210013.)

ITALY



(8210015.)

NORWAY



(8210019.)

CZECH



(82100115.)

HUNGARY



(82100119.)

ARAB



(82100191.)

SWITZERLAND_FRENCH



(82100129.)

CROATIA



(82100132.)

SERBIA_LATIN



(82100136.)

CZECH_QWERTZ



(82100138.)

SWEDEN



(82100123.)

RUSSIA



(82100126.)

SLOVENIA



(82100131.)

ALBANIA



(82100135.)

SERBIA_CYRILLIC



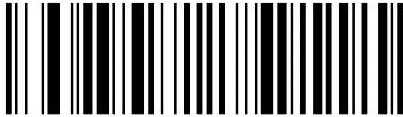
(82100137.)

CZECH_QWERTY



(82100139.)

DUTCH



(82100111.)

ESTONIA



(82100141.)

LITHUANIA



(82100144.)

SLOVAKIA



(82100122.)

IRISH



(82100173.)

FAEROESE



(82100183.)

TURKEY_F



(82100127.)

TURKEY_Q



(82100124.)

JAPAN_ASCII

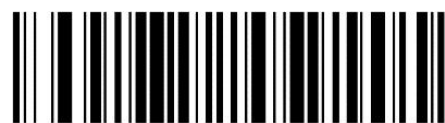
Please scan the three barcodes for Japanese.



(82100128.)



(8210030.)



(8210083.)

Chapter 3 Beeper/Illumination and Aiming LED Settings

Introduction

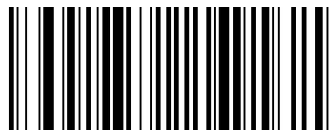
This chapter mainly introduces the configuration of the beep and LED of the barcode scanner when it is powered on, decoded, and triggered by the button.

Startup Beeper

The scanner can be programmed to beep when it's started up. Default = Startup Beeper On.



(8410130.)
Startup Beeper Off



(8410131.)
*Start Beeper On

Trigger Click Beeper

To hear an audible click every time the scanner button is pressed, scan the **Trigger Click Beeper On** barcode below. Default = Trigger Click Beeper Off.



(8410140.)
*Trigger Click Beeper Off



(8410141.)
Trigger Click Beeper On

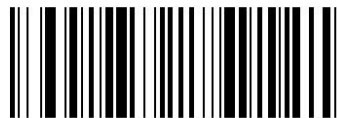
Good Read and Error Read Indicators

Good Read Beeper

The beeper may be programmed On or Off in response to a good read. Default = Good Read Beeper On.



(8410010.)
Good Read Beeper Off



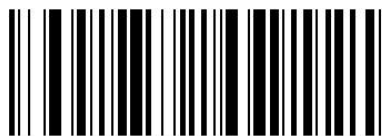
(8410011.)
* Good Read Beeper On

Good Read Beeper Volume

The beeper volume codes modify the volume of the beep the scanner emits on a good read. Default = High.



(8410091.)
Low



(8410092.)
Medium



(8410093.)
* High



(8410090.)
Off

Good Read Beeper Frequency

The beeper frequency codes modify the frequency of the beep the scanner emits on a good read. Default = Medium.



(8410061600.)
Low (1600 Hz)



(8410062400.)
* Medium (2400 Hz)



(8410064200.)
High (4200 Hz)

Good Read Beeper Duration

The beeper duration codes modify the length of the beep the scanner emits on a good read. Default = Normal .



(8410020.)
* Normal



(8410021.)
Short

Error Read Beeper Frequency

The beeper frequency codes modify the frequency of the sound the scanner emits when there is a bad read or error. Default = Razz.



(8410073250.)
* Razz (250 Hz)



(841007250.)
Medium (3250 Hz)



(8410074200.)
High (4200 Hz)

Good Read LED

The LED indicator can be programmed **On** or **Off** in response to a good read. Default = On.



(8410081.)
* Good Read LED On



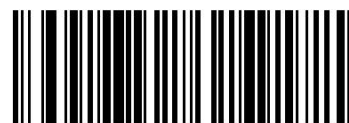
(8410080.)
Good Read LED Off

Good Read Delay

This sets the minimum amount of time before the scanner can read another barcode. Default = * Short Delay (750 ms)



(8510060.)
No Delay



(851006750.)
* Short Delay (750 ms)



(8510061000.)
Medium Delay (1,000 ms)



(8510061500.)
Long Delay (1,500 ms)

Lighting Settings



(8980051.)
Turn on led



(8980050.)
Turn off led

Aimer Settings



(8980022.)
Turn on aimer



(8980020.)
Turn off aimer

Chapter 4 Data Editing

Introduction

This chapter describes how to add prefixes and suffixes.

- Default prefix = None. Default suffix = None.
- A prefix or suffix may be added or cleared from one symbology or all symbologies.
- You can add any prefix or suffix from the ASCII Conversion Chart deplus Code I.D. and AIM I.D.
- Enter prefixes and suffixes in the order in which you want them to appear on the output.
- When setting up for specific symbologies (as opposed to all symbologies), the specific symbology ID value counts as an added prefix or suffix character.
- The maximum size of a prefix or suffix configuration is 200 characters, which includes header information.

Add Prefix or Suffix

Step 1. Scan the **Add Prefix** or **Add Suffix** symbol

Step 2. Determine the 2 digit Hex value from the [Symbology Chart](#) for the symbology to which you want to apply the prefix or suffix. For example, for Code 11, Code ID is "h" and Hex ID is "68".

Step 3. Scan the 2 hex digits from the [Programming Chart](#) inside the back cover of this manual or scan **9, 9** for all symbologies.

Step 4. Determine the hex value from the [ASCII Conversion Chart](#), for the prefix or suffix you wish to enter.

Step 5. Scan the 2 digit hex value from the [Programming Chart](#) inside the back cover of this manual.

Step 6. Repeat Steps 4 and 5 for every prefix or suffix character.

Step 7. To add the Code I.D., scan **5, C, 8, 0**.

To add AIM I.D., scan **5, C, 8, 1**.

To add a backslash (\), scan **5, C, 5, C**.

Step 8. Scan **Save** to exit and save, or scan **Discard** to exit without saving.



(889002.)
Add Prefix



(888002.)
Add Suffix



(800002.)
Save



(800000.)
Discard

Example

Add a Suffix to a specific symbology

To send a CR (carriage return) Suffix for code 128. only:

Step 1. Scan **Add Suffix**.

Step 2. Determine the 2 digit hex value from the [Symbology Charts](#) for code 128.

Step 3. Scan **6, 3** from the [Programming Chart](#) inside the back cover of this manual.

Step 4. Determine the hex value from the [ASCII Conversion Chart](#), for the CR (carriage return).

Step 5. Scan **0, D** from the [Programming Chart](#) inside the back cover of this manual.

Step 6. Scan **Save**, or scan **Discard** to exit without saving.



(888002.)
Add Suffix



(K6K.)
6



(KAK.)
A



(K0K.)
0



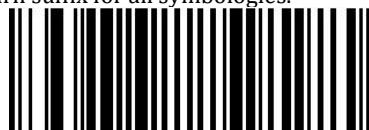
(SDS.)
D



(800002.)
Save

To Add a Carriage Return Suffix to All Symbologies

Scan the following barcode if you wish to add a carriage return suffix to all symbologies at once. This action first clears all current suffixes, then programs a carriage return suffix for all symbologies.



(890000.)
Add CR Suffix All Symbologie

To Add a Line Break Suffix to All Symbologies

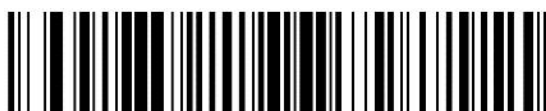
Scan the following barcode if you wish to add a line break suffix to all symbologies at once. This action first clears all current suffixes, then programs a line break suffix for all symbologies.



(888002990A.)
Add LF Suffix All Symbologies

To Add a Carriage Return & a Line Break Suffix to All Symbologies

Scan the following barcode if you wish to add a carriage return suffix and a line break suffix to all symbologies at once. This action first clears all current suffixes, then programs a carriage return suffix and a line break suffix for all symbologies.



(888002990D0A.)
Add CR and LF Suffix All Symbologies

Keyboard Operation

Different operations can be performed on the keyboard through configuration during decoding output, such as automatic saving after decoding output.

Step 1: determine the hexadecimal value corresponding to the keyboard operation to be performed from the [ASCII conversion of keyboard operation](#), and Determine the 2-digit hexadecimal value of the barcode to be set

Step 2. scan the barcode of "add keyboard operation".

Step 3. Determine the sequence of keyboard operation and barcode output. If keyboard operation is in front, scan "add prefix" barcode, and then scan "add suffix" barcode.

Step 4. Scan the corresponding 4-digit hexadecimal values in the [Programming Charts](#) of this manual according to the corresponding hexadecimal values (including barcode type and corresponding keyboard operation)

Step 5. Scan "save" barcode.

Step 6, scan "end adding keyboard operation"



(8210042)

Add keyboard operation



(8210040)

End adding keyboard operation

Example: add operation that automatic preservation after decoding output for all kinds of barcodes

First, confirm the operation to be performed: save after barcode output, so suffix should be added after output barcode. Then determine the corresponding hexadecimal value according to the table in the appendix, all kinds of barcodes correspond to "9" "9", The save operation corresponds to "1" "3".

After confirmation, scan "add keyboard operation" barcode, add suffix barcode, 9, 9, 1, 3, and then scan "save" barcode and "end adding keyboard operation" barcode

(Here "9" and "9" correspond to all coding systems, and "1" and "3" correspond to decoding output and saving)

Clear Prefixes or Suffixes

You can clear a single prefix or suffix, or clear all prefixes/suffixes for a symbology. If you have been entering prefixes and suffixes for single symbologies, you can use **Clear One Prefix (Suffix)** to delete a specific character from a symbology. When you **Clear All Prefixes (Suffixes)**, all the prefixes or suffixes for a symbology are deleted.

Step 1. Scan the **Clear One Prefix** or **Clear One Suffix** symbol.

Step 2. Determine the 2 digit Hex value from the [Symbology Charts](#) for the symbology from which you want to clear the prefix or suffix.

Step 3. Scan the 2 digit hex value from the [Programming Chart](#) inside the back cover of this manual or scan 9, 9 for all symbologies.

Step 4. Scan the **Save** symbol.



(889004.)

Clear One Prefix



(888004.)

Clear One Suffix



(800002.)

Save

Prefix Selections



(889002.)

Add Prefix



(889004.)

Clear One Prefix



(889003.)

Clear All Prefixes

Suffix Selections



(888002.)

Add Suffix



(888004.)

Clear One Suffix



(888003.)

Clear All Suffixes

Function Code Transmit

When this selection is enabled and function codes are contained within the scanned data, the scanner transmits the function code to the terminal. Default = Disable.



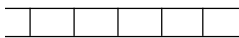
(8080071.)
*Enable



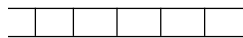
(8080070.)
Disable

Inter message Delay

An inter-message delay of up to 5000 milliseconds (in 5ms increments) may be placed between each scan transmission. Scan the **Inter-message Delay** barcode below, then scan the number of 5ms delays, and the **Save** barcode using the [Programming Chart](#) inside the back cover of this manual.



1st Scan Transmission
Inter-message Delay



2nd Scan Transmission



(851004.)
Inter-message Delay

To remove this delay, scan the **Inter-message Delay** barcode, then set the number of delays to 0. Scan the **Save** barcode using the [Programming Chart](#) inside the back cover of this manual.

Example: set a bar code **Inter-message Delay** of 100ms:

First scan " **Inter-message Delay** ", then scan "2" "0" from the [Programming Chart](#) (100 / 5 = 20), then scan "save" barcode.

Chapter 5 Symbologies

Introduction

Each type of barcode has its own unique properties. The barcode scanner can be adjusted to accommodate these property changes through the configuration code in this chapter. The fewer the barcode types, the faster the barcode scanner can read. It is recommended to disable those types that are rarely used in your application to increase the efficiency of the scanner.

All Symbologies

If you want to decode only a particular symbology, scan **All Symbologies Off** (the scanner still can read all configuration barcodes after scanning **All Symbologies Off**) followed by the **On** configuration barcode for that particular symbology.



(9990011.)
All Symbologies On



(9990010.)
All Symbologies Off

Note: When **All Symbologies On** is scanned, 2D Postal Codes are not enabled. 2D Postal Codes must be enabled separately.

Message Length Description

You are able to set the valid reading length of some of the barcode symbologies. If the data length of the scanned barcode doesn't match the valid reading length, the scanner will issue an error tone. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length barcode data. This helps reduce the chances of a misread.

EXAMPLE: Decode only those barcodes with a count of 6-10 characters.
Min. length = 06 Max. length = 10

Step 1. Select the barcode symbology to set the maximum reading length or the minimum reading length, scan the **Minimum Message Length** barcode in its catalog, and scan the number "6" and "Save" barcodes from the [Programming Chart](#).

Step 2. Scan the **Maximum Message Length** barcode and scan the numbers 1, 0 barcode and **Save** barcode from the [Programming Chart](#).

The above process sets the selected barcode symbology small reading length to 6 and the maximum reading length to 10

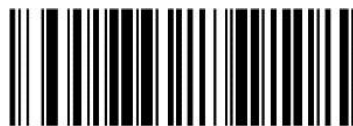
EXAMPLE: Decode only those barcodes with a count of 13 characters.
Min. length = 13 Max. length = 13

Enable/Disable all 1D Barcode

On/Off



(9950040.)
All 1D Barcode on



(9950041.)
All 1D Barcode off

Enable/Disable all 2D Barcode

On/Off

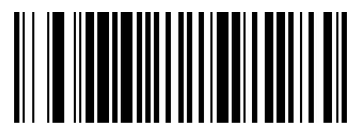


(9950070.)
All 2D Barcode on



(9950071.)
All 2D Barcode off

Codabar



(900000.)
Default All Codabar Settings

On/Off



(9000031.)
* On



(9000 030.)
Of

Start/Stop Characters

Start/Stop characters identify the leading and trailing ends of the barcode. You may either transmit, or not transmit Start/Stop characters. Default = Don't Transmit.



(9000061.)
Transmit



(9000060.)
* Don't Transmit

Check Character

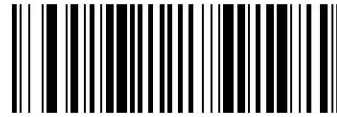
No Check Character indicates that the scanner reads and transmits barcode data with or without a check character.

When Check Character is set to **Validate and Transmit**, the scanner will only read Codabar barcodes printed with a check character, and will transmit this character at the end of the scanned data.

When Check Character is set to Validate, but Don't Transmit, the unit will only read Codabar barcodes printed with a check character, but will not transmit the check character with the scanned data. Default = No Check Character.



(9000010.)
* No Check Character



(9000011.)
Validate but Don't Transmit



(9000012.)
Validate and Transmit

Concatenation

Codabar supports symbol concatenation. When you enable concatenation, the scanner looks for a Codabar symbol having a "D" start character, adjacent to a symbol having a "D" stop character. In this case the two messages are concatenated into one with the "D" characters omitted.



Select Require to prevent the scanner from decoding a single "D" Codabar symbol without its companion. This selection has no effect on Codabar symbols without Stop/Start D characters.



(9000021.)
On



(9000022.)
Require



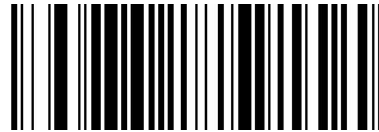
(9000020.)
* Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 2-60. Minimum Default = 4, Maximum Default = 60.



(900005.)
Minimum Message Length



(900004.)
Maximum Message Length

Code 39

< Default All Code 39 Settings >

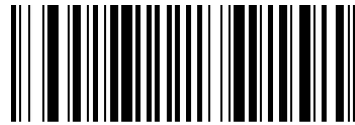


(901000.)
Default All Code 39 Settings

On/Off



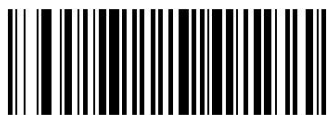
(9010011.)
*On



(9010010.)
Off

Start/ Stop Characters

Start/Stop characters identify the leading and trailing ends of the barcode. You may either transmit, or not transmit Start/Stop characters. Default = Don't Transmit.



(9010091.)
Transmit



(9010090.)
* Don't Transmit

Check Character

No Check Character indicates that the scanner reads and transmits bar- code data with or without a check character.

When Check Character is set to **Validate, but Don't Transmit**, the unit only reads Code 39 barcodes printed with a check character, but will not transmit the check character with the scanned data.

When Check Character is set to **Validate and Transmit**, the scanner only reads Code 39 barcodes printed with a check character,

and will transmit this character at the end of the scanned data. Default = No Check Character.



(9010040.)
* No Check Character



(9010041.)
Validate, but Don't Transmit



(9010042.)
Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 0-48. Minimum Default = 0, Maximum Default = 48.



(901008.)
Minimum Message Length



(901007.)
Maximum Message Length

Code 39 Append

This function allows the scanner to append the data from several Code 39 barcodes together before transmitting them to the host computer. When the scanner encounters a Code 39 barcode with the append trigger character(s), it buffers Code 39 barcodes until it reads a Code 39 barcode that does not have the append trigger. The data is then transmitted in the order in which the barcodes were read (FIFO). Default = Off.



Example

After scanning **on** barcode, scan the three bar codes below in order. The barcode scanner does not output any data until the last bar code is scanned. After scanning the **ESS** barcode, the SUCCESS word is output correctly.



Code 32 Pharmaceutical (PARAF)

Code 32 Pharmaceutical is a form of the Code 39 symbology used by Italian pharmacies. This symbology is also known as PARAF.

When you configure code32, you need to turn on code39 before you configure it.



FULL ASCII

If Full ASCII Code 39 decoding is enabled, certain character pairs within the bar-code symbol will be interpreted as a single character. For example:\$V will be decoded as the ASCII character SYN, and /C will be decoded as the ASCII character #. Default = Off.

NUL%U	DLE \$P	SP SPACE	0 0	@%V	P P	' %W	p +P
SOH\$A	DC1 \$Q	! /A	1 1	A A	Q Q	a +A	q +Q
STX \$B	DC2 \$R	" /B	2 2	B B	R R	b +B	r +R
ETX \$C	DC3 \$S	# /C	3 3	C C	S S	c +C	s +S
EOT \$D	DC4 \$T	\$ /D	4 4	D D	T T	d +D	t +T
ENQ \$E	NAK \$U	% /E	5 5	E E	U U	e +E	u +U
ACK \$F	SYN \$V	& /F	6 6	F F	V V	f +F	v +V
BEL \$G	ETB \$W	' /G	7 7	G G	W W	g +G	w +W
BS \$H	CAN \$X	(/H	8 8	H H	X X	h +H	x +X
HT \$I	EM \$Y	) /I	9 9	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 %A	+ /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 decode as a minus sign and period respectively. Character pairs /P through /Y decode as 0 through 9.



(9010031.)
FULL ASCII On



(9010030.)
* FULL ASCII Off

Interleaved 2 of 5

< Default All Interleaved 2 of 5 Settings >



(902000.)

Default All Interleaved 2 of 5 Settings

On/Off



(9020021.)

* On



(9020020.)

Off

Check Digit

No Check Digit indicates that the scanner reads and transmits barcode data with or without a check digit.

When Check Digit is set to **Validate, but Don't Transmit**, the unit only reads Interleaved 2 of 5 barcodes printed with a check digit, but will not transmit the check digit with the scanned data.

When Check Digit is set to **Validate and Transmit**, the scanner only reads Interleaved 2 of 5 barcodes printed with a check digit, and will transmit this digit at the end of the scanned data. Default = No Check Digit.



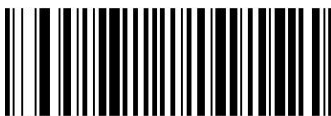
(9020010.)

* No Check Digit



(9020011.)

Validate, but Don't Transmit



(9020012.)

Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(902004.)
Minimum Message Length



(902003.)
Maximum Message Length

NEC 2 OF 5

< Default All NEC 2 of 5 Settings >



(903000.)
Default All NEC 2 of 5 Settings

On/Off



(9030011.)
* On



(9030010.)
Off

Check Digit

No Check Digit indicates that the scanner reads and transmits barcode data with or without a check digit.

When Check Digit is set to **Validate, but Don't Transmit**, the unit only reads NEC 2 of 5 barcodes printed with a check digit, but will not transmit the check digit with the scanned data.

When Check Digit is set to **Validate and Transmit**, the scanner only reads NEC 2 of 5 barcodes printed with a check digit, and will transmit this digit at the end of the scanned data. Default = No Check Digit



(9030020.)
* No Check Digit



(9030021.)
Validate, but Don't Transmit



(9030022.)
Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(903004.)

Minimum Message Length



(903003.)

Maximum Message Length

Code 93

< Default All Code 93 Settings >



(904000.)

Default All Code 93 Settings

On/Off



(9040021.)

*On



(9040020)

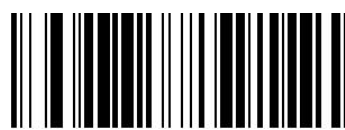
Off

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 0-80. Minimum Default = 0, Maximum Default = 80.



(904004.)

Minimum Message Length



(904003)

Maximum Message Length

Straight 2 of 5 Industrial (three-bar start/stop)

<Default All Straight 2 of 5 Industrial Settings>



(905000.)

Default All Straight 2 of 5 Industrial (three-bar start/stop)Settings

On/Off



(9050011.)
On



(9050010.)
*Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-48. Minimum Default = 4, Maximum Default = 48.



(905003.)
Minimum Message Length



(905003.)
Maximum Message Length

Straight 2 of 5 IATA (two-bar start/stop)

<Default All Straight 2 of 5 IATA Settings>



(906000.)

Default All Straight 2 of 5 IATA (two-bar start/stop)Settings

On/Off



(9060011.)

On



(9060010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-48. Minimum Default = 4, Maximum Default = 48.



(906003.)

Minimum Message Length



(906002.)

Maximum Message Length

Matrix 2 of 5

<Default All Matrix 2 of 5 Settings>



(907000.)

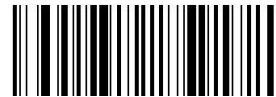
Default All Matrix 2 of 5 Settings

On/Off



(9070011.)

On



(9070010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 4, Maximum Default = 80.



(907003.)

Minimum Message Length



(907002.)

Maximum Message Length

Check

Scan the barcode below to enable or disable the check function of matrix25.



(9070051.)

Enable Check Function



(9070050.)

Disable Check Function

Code 11

<Default All Settings>



(908000.)

Default All Code 11 Settings

On/Off



(9080021.)

On



(9080020.)

* Off

Check Digits Required

This option sets whether 1 or 2 check digits are required with Code 11 barcodes. Default = Two Check Digits.



(3110280.)

One Check Digit



(3110281.)

* Two Check Digits

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 4, Maximum Default = 80.



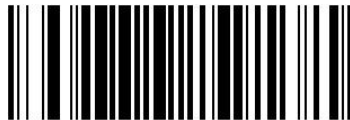
(908004.)
Minimum Message Length



(908003.)
Maximum Message Length

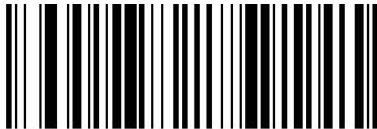
Code 128

<Default All Code 128 Settings>



(909000.)
Default All Code 128 Settings

On/Off

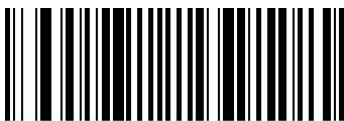


(9090011.)
* On



(9090010.)
Off

ISBT 128 Concatenation



(9020051.)
ISBT 128 On



(9020050.)
ISBT 128 Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 0-80. Minimum Default = 0, Maximum Default = 80.



(909003.)

Minimum Message Length



(909002.)

Maximum Message Length

GS1-128

<Default All GS1-128 Settings>



(910000.)

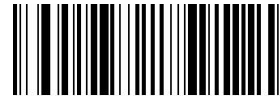
Default All GS1-128 Settings

On/Off



(9100011.)

* On



(9100010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 1, Maximum Default = 80.



(910003.)

Minimum Message Length



(910002.)

Maximum Message Length

Telepen

<Default All Telepen Settings>



(911000.)

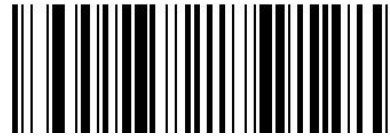
Default All Telepen Settings

On/Off



(9110011.)

On



(9110010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-60. Minimum Default = 1, Maximum Default = 60.



(911003.)

Minimum Message Length



(911002.)

Maximum Message Length

UPC-A

<Default All UPC-A Settings>



(912000.)

Default All UPC-A Settings

On/Off



(9120030.)

* On



(9120031.)

Off

Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data or not. Default = On.



(9120041.)

* On



(9120040.)

Off

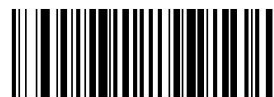
Number System

The numeric system digit of a U.P.C. symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will not transmit it. Default = On.



(9120051.)

* On



(9120050.)

Off

Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-A data.
Default = Off for both 2 Digit and 5 Digit Addenda.



(9120011.)
2 Digit Addenda On



(9120010.)
* 2 Digit Addenda Off



(9120021.)
5 Digit Addenda On



(9120020.)
* 5 Digit Addenda Off

Addenda Required

When **Required** is scanned, the scanner will only read UPC-A barcodes that have addenda. You must then turn on a 2 or 5 digit addenda. Default = Not Required.



(9120061.)
Required



(9120060.)
* Not Required

Addenda Separator

When this feature is on, there is a space between the data from the barcode and the data from the addenda. When turned off, there is no space. Default = On.



(9120071.)
* On



(9120070.)
Off

Note

Scan the barcode below to convert UPC-A to EAN_13 or not.



(9120111.)
Convert



(9120110.)
Not convert

UPC-E0

<Default All UPC-E Settings>



(914000.)

Default All UPC-E0 Settings

On/Off

Most U.P.C. barcodes lead with the 0 number system. To read these codes, use the ***UPC-E0 On** selection. If you need to read codes that lead with the 1 number system, use [UPC-E1](#). Default = On.



(9140101.)
*UPC-E0 On



(9140100.)
UPC-E0 Off

Expand

UPC-E Expand expands the UPC-E code to the 12 digit, UPC-A format.
Default = Off.



(9140021.)
On



(9140020.)
* Off

Addenda Required

When **Required** is scanned, the scanner will only read UPC-E barcodes that have addenda. Default = Not Required.



(9140031.)
Required



(9140030.)
* Not Required

Addenda Separator

When this feature is On, there is a space between the data from the barcode and the data from the addenda. When turned Off, there is no space. Default = On



(9140041.)
* On



(9140040.)
Off

Check Digit

Check Digit specifies whether the check digit should be transmitted at the end of the scanned data or not. Default = On.



(9140051.)
*On



(9140050.)
off

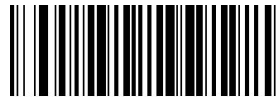
Number System

The numeric system digit of a U.P.C. symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will not transmit it. To prevent transmission, scan **Off**. Default = On.



(9140061.)

* On



(9140060.)

Off

Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-E data. Default = Off for both 2 Digit and 5 Digit Addenda.



(9140071.)

2 Digit Addenda On



(9140070.)

* 2 Digit Addenda Off



(9140081.)

5 Digit Addenda On



(9140080.)

* 5 Digit Addenda Off

UPC-E1

Most U.P.C. barcodes lead with the 0 number system. For these codes, use UPC-E0. If you need to read codes that lead with the 1 number system, use the **UPC-E1 On** selection. Default = Off.



(9140091.)
UPC-E1 On



(9140090.)
*UPC-E1 Of

EAN/JAN 13



(915000.)
Default All EAN/JAN-13 Settings

On/Off



(9150011.)
*On



(9150010.)
Off

Note: If you want to convert UPC-A barcodes to EAN-13 format, scan the **UPC-A Off** barcode.

Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data or not. Default = On.



(9150021.)
* On



(9150020.)
Off

Addenda

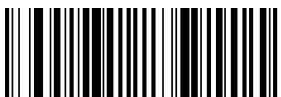
This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-13 data. Default = Off for both 2 Digit and 5 Digit Addenda.



(9150031.)
2 Digit Addenda On



(9150030.)
* 2 Digit Addenda Off



(9150041.)
5 Digit Addenda On



(9150040.)
* 5 Digit Addenda Off

Addenda Required

When **Required** is scanned, the scanner will only read EAN/JAN-13 barcodes that have addenda. Default = Not Required.



(9150051.)
Required



(9150050.)
* Not Required

Addenda Separator

When this feature is **On**, there is a space between the data from the barcode and the data from the addenda. When turned **Off**, there is no space. Default = On.



(9150061.)
* On



(9150060.)
Off

ISBN Translate

When **On** is scanned, EAN-13 Bookland symbols are translated into their equivalent ISBN number format. Default = Off.



(9150071.)
On



(9150070.)
* Off

EAN/ JAN-8

<Default All EAN/JAN-8 Setting>



(916000.)

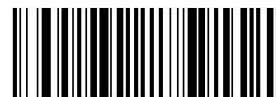
Default All EAN/JAN-8 Settings

On/Off



(9160011.)

* On



(9160010.)

Off

Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data or not. Default = On.



(9160021.)

* On



(9160020.)

Off

Addenda

This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-8 data.
Default = Off for both 2 Digit and 5 Digit *Addenda*.



(9160031.)

2 Digit Addenda On



(9160030.)

* 2 Digit Addenda Off



(9160041.)

5 Digit Addenda On



(9160040.)

* 5 Digit Addenda Off

Addenda Required

When **Required** is scanned, the scanner will only read EAN/JAN-8 barcodes that have addenda. Default = Not Required.



(9160051.)

Required



(9160050.)

* Not Required

Addenda Separator

When this feature is **On**, there is a space between the data from the barcode and the data from the addenda. When turned **Off**, there is no space. Default = On.



(9160061.)
* On



(9160060.)
Off

MSI

<Default All MSI Setting>



(917000.)
Default All MSI Settings

On/Off



(9170011.)
On



(9170010.)
* Off

Check Character

MSI barcodes use different types of check characters. You can configure the barcode scanner to read the MSI barcode using the check character. Default = **Validate MOD 10, but Don't Transmit**

When Check Character is set to **Validate MOD 10 and Transmit**, the scanner will only read MSI barcodes printed with the specified type check character(s), and will transmit the character(s) at the end of the scanned data.

When Check Character is set to **Validate MOD 10, but Don't Transmit**, the unit will only read MSI barcodes printed with the specified type check character(s), but will not transmit the check character(s) with the scanned data.



(9170020.)

* Validate MOD 10, but Don't Transmit



(9170021.)

Validate MOD 10 and Transmit



(9170026.)

Disable MSI Check Characters

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 4-48. Minimum Default = 4, Maximum Default = 48.



(917004.)

Minimum Message Length



(917003.)

Maximum Message Length

GS1 DataBar Omnidirectional

< Default All GS1 DataBar Omnidirectional Settings >



(918000.)

Default All GS1 DataBar Omnidirectional Settings

On/Off



(9180011.)

* On



(9180010.)

Off

GS1 DataBar Limited

< Default All GS1 DataBar Limited Settings >



(919000.)

Default All GS1 DataBar Limited Settings

On/Off



(9190011.)

* On



(9190010.)

Off

GS1 DataBar Expanded

< Default All GS1 DataBar Expanded Settings >



(920000.)

Default All GS1 DataBar Expanded Settings

On/Off



(9200011.)

* On



(9200010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 4-74. Minimum Default = 4, Maximum Default = 74.



(920003.)

Minimum Message Length



(920002.)

Maximum Message Length

PDF417

< Default All PDF417 Settings >



(924000.)

Default All PD417 Settings

On/Off



(9240011.)

* On



(9240010.)

Off

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-2750. Minimum Default = 1, Maximum Default = 2750.



(924003.)

Minimum Message Length



(924002.)

Maximum Message Length

QRCode

< Default All QR Code Settings >



(928000.)

Default All QR Code Settings

On/Off

This selection applies to both QR Code and Micro QR Code.



(9280011.)

* On



(9280010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-7089. Minimum Default = 1, Maximum Default = 7089.



(928003.)

Minimum Message Length



(928002.)

Maximum Message Length

Data Matrix

< Default All Data Matrix Settings >



(930000.)

Default All Data Matrix Settings

On/Off



(9300011.)

* On



(9300010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-3116. Minimum Default = 1, Maximum Default = 3116.



(930002.)

Minimum Message Length



(930003.)

Maximum Message Length

Aztec Code

< Default All Aztec Code Settings >



(931000.)

Default All Aztec Code Settings

On/Off



(9310011.)

*On



(9310010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-3832. Minimum Default = 1, Maximum Default = 3832.



(931003.)

Minimum Message Length



(931002.)

Maximum Message Length

China Post (Hong Kong 2 of 5)

<Default All China Post (Hong Kong 2 of 5) Settings>



(936000.)

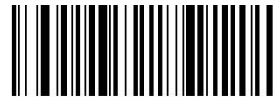
Default All China Post (Hong Kong 2 of 5) Settings

On/Off



(9360011.)

On



(9360010.)

*Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(9360003.)

Minimum Message Length



(9360002.)

Maximum Message Length

Korea Post

<Default All Korea Post Settings>



(937000.)

Default All Korea Post Settings

On/Off



(9370011.)

On



(9370010.)

* Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 48.



(937003.)

Minimum Message Length



(937002.)

Maximum Message Length

Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data. Default = Don't Transmit.



(9370041.)

On



(9370040.)

* Off

Han Xin Code

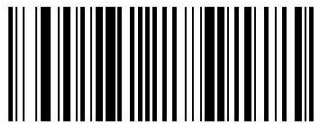
<Default All Han Xin Code Settings>



(932000.)

Default All Han Xin Code Settings

On/Off



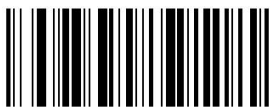
(9320011.)
On



(9320010.)
* Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-1000. Minimum Default = 1, Maximum Default = 1000.



(932003.)
Minimum Message Length



(932002.)
Maximum Message Length

Maxi code

<default all maxi code settings>



(929000.)

On/Off



(9290011.)
On



(9290010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-150. Minimum Default = 1, Maximum Default = 150.



(929003.)
Minimum Message Length



(929002.)
Maximum Message Length

Micro Pdf417

<default all Micro Pdf417 settings>



(925000.)

On/Off



(9250011.)
On



(9250010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-366. Minimum Default = 1, Maximum Default = 366.



(925003.)
Minimum Message Length



(925002.)
Maximum Message Length

Composites

<default all composites settings>



(926000.)

On/Off



(9260011.)
On



(9260010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-2435. Minimum Default = 1, Maximum Default = 2435.



(926004.)

Minimum Message Length



(926003.)

Maximum Message Length

Codablock A

<default all composites settings>



(922000.)

On/Off



(9220011.)

On



(9220010.)

Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-600. Minimum Default = 1, Maximum Default = 600.



(922003.)

Minimum Message Length



(922002.)

Maximum Message Length

Codablock F

<default all composites settings>



(923000.)

On/Off



(9230011.)
On



(9230010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to [Message Length Description](#) for additional information. Minimum and Maximum lengths = 1-2048. Minimum Default = 1, Maximum Default = 2048.



(923003.)
Minimum Message Length



(923002.)
Maximum Message Length

Chapter 6 Utilities

Show Software Revision

Scan the barcode below to output the current software revision, unit serial number, and other product information.



{809004?.}

Show Revision

Mirror settings

Scan the barcode below to set left to right mirror ,or no mirror.



{8960271.*}

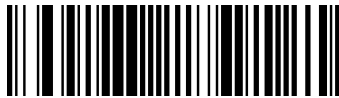
Left to right mirror



{8960270.}

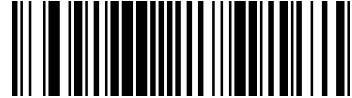
No mirror

barcode reverse



*(8910010.)

Unsupport reverse



{8910011.}

Support reverse



{8910012.}

Both support

If the device is configured to support only reverse, you want to configure it to support common codes at the same time. Scan the following reverse code to support all



{8910012.}

Both support

Safe mode / Disable all setting codes

If you don't hope anybody configure the scanner after the scanner installed in your device, then you can scan **Disable all setting codes**.



{8000050.}

Disable all setting codes



*(8000051.)

Enable all setting codes

QR URL barcode configuration



(9950061.)
Turn off website



(9950060.)
Turn on website

code ID prefix

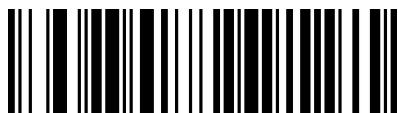


(889002995C80.)
Add barcode sequence number prefix

Barcode scanner trigger mode

Automatic detection mode

In the automatic detection scanning mode, turn on the low lighting to detect whether there is barcode passing by. When there is barcode detected, turn on the lighting to read the barcode.



(801044.)
Automatic detection mode

Manual trigger mode

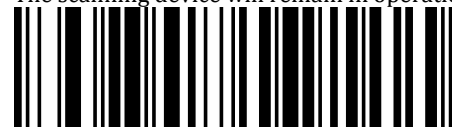
In this mode, you need to trigger the key to scan the barcode.



(801030.)
Manual trigger mode

Continuous mode

The scanning device will remain in operation.



(801043.)
Continuous mode

Chapter 7 Maintenance And Customer Service

Maintenance

1. Stains and dust on the scanning window can sometimes affect the affection of the barcode scanner. When cleaning, use a good-quality tissue or a soft cloth to wipe gently.
Don't use poor-quality paper for cleaning, it would damage the surface of the window and affect the reading effect of the barcode scanner.
2. Do not spray any liquid on the window.

Customer Service

For Any Technical Support, please contact us at:
support@rtscan.net

Chapter 8 Command Configuration Guide

Command format:

[FF 4D 0D]+Hex value of programming code+[2E]

Example:

If we hope the Startup Beeper Off, then from page 14th, we can see the programming code value is **8410130** Their Hex value is: **38343130313330**, so the full command is: FF4D0D**38343130313330**2E

Frequently used commands:

Function	Send Commands	Response
Factory default settings	[0xff][0x4d][0x0d][0x38][0x30][0x30][0x30][0x30][0x36][0x2e]	[0x38][0xf8][0x00]
Query Firmware version	[0xff][0x4d][0x0d][0x38][0x30][0x39][0x30][0x30][0x34][0x3a][0x2e]	[0x38][0x30][0x39][0x30][0x30][0x34][0x3a][version number][0x06][0x2e]
Manual trigger mode	[0xff][0x4d][0x0d][0x38][0x36][0x31][0x30][0x30][0x32][0x30][0x2e]	[0x38][0x36][0x31][0x30][0x30][0x32][0x30][0x06][0x2e]
Sense mode	[0xff][0x4d][0x0d][0x38][0x36][0x31][0x30][0x30][0x32][0x33][0x2e]	[0x38][0x36][0x31][0x30][0x30][0x32][0x33][0x06][0x2e]
Continuous scan mode	[0xff][0x4d][0x0d][0x38][0x36][0x31][0x30][0x30][0x32][0x38][0x2e]	[0x38][0x36][0x31][0x30][0x30][0x32][0x38][0x06][0x2e]
USB Keyboard	[0xff][0x4d][0x0d][0x38][0x38][0x31][0x30][0x30][0x31][0x31][0x32][0x34][0x2e]	
USB COM	[0xff][0x4d][0x0d][0x38][0x38][0x31][0x30][0x30][0x31][0x31][0x33][0x33][0x2e]	
RS232/TTL232	[0xff][0x4d][0x0d][0x38][0x38][0x31][0x30][0x30][0x31][0x30][0x2e]	[0x38][0x38][0x31][0x30][0x30][0x31][0x30][0x06][0x2e]
Check whether the device is online	[0xff][0x43][0x0d]	[0x06][0x15][0xde][0xdf]
Trigger	[0xff][0x54][0x0d]	
Stop decoding	[0xff][0x55][0x0d]	
Decoding timeout	[0xff][0x4d][0x0d][0x38][0x36][0x31][0x30][0x30][0x31][XXXXXXX][0x2e]	[0x38][0x36][0x31][0x30][0x30][0x31][XXXXXXX][0x06][0x2e]
Add carriage return and line feed	[0xff][0x4d][0x0d][0x38][0x38][0x38][0x30][0x30][0x32][0x39][0x39][0x30][0x44][0x30][0x41][0x2e]	[0x38][0x38][0x38][0x30][0x30][0x32][0x39][0x39][0x30][0x44][0x30][0x41][0x06][0x2e]
Delete carriage return and line feed	[0xff][0x4d][0x0d][0x38][0x38][0x38][0x30][0x30][0x33][0x2e]	[0x38][0x38][0x38][0x30][0x30][0x33][0x06][0x2e]
Add carriage return	[0xff][0x4d][0x0d][0x38][0x39][0x30][0x30][0x30][0x30][0x30][0x2e]	[0x38][0x39][0x30][0x30][0x30][0x30][0x06][0x2e]
Delete carriage return	[0xff][0x4d][0x0d][0x38][0x38][0x38][0x30][0x30][0x33][0x2e]	[0x38][0x38][0x38][0x30][0x30][0x33][0x06][0x2e]

Reference Symbolology Charts

1D Symbolologies:

Symbolology	AIM		RTscan	
	ID	Possible Modifiers (m)	ID	Hex
All Symbolologies				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

Symbology	AIM		RTscan	
	ID	Possible Modifiers (m)	ID	Hex
GS1				
GS1 DataBar	]em	0	y	79
GS1 DataBar Limited	]em		{	7B
GS1 DataBar Expanded	]em		}	7D
GS1-128	]C1		I	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 RTscan Code ID				5C 80
Add AIM Code ID				5C 81
Add Backslash				5C 5C
Batch Mode Quantilty			5	35

2D Symbolologies

Symbology	AIM		RTscan	
	ID	Possible Modifiers (m)	ID	Hex
All Symbolologies				99
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
Micro Pdf417	]Lm	0-5	R	52
QR Code	]Qm	0-6	s	73
Micro QR Code	]Qm		s	73

Postal Symbologies

Symbology	AIM		RTscan	
	ID	Possible Modifiers (m)	ID	Hex
All Symbologies				99
Australian Post	JX0		A	41
British Post	JX0		B	42
Canadian Post	JX0		C	43

Symbology	AIM		RTscan	
	ID	Possible Modifiers (m)	ID	Hex
China Post	JX0		Q	51
InfoMail	JX0		,	2c
Intelligent Mail Bar Code	JX0		M	4D
Japanese Post	JX0		J	4A
KIX (Netherlands) Post	JX0		K	4B
Korea Post	JX0		?	3F
Planet Code	JX0		L	4C
Postal-4i	JX0		N	4E
Postnet	JX0		P	50

ASCII Conversion Chart

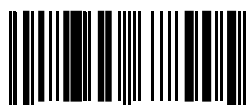
H ex	Dec	Char
00	0	NUL (Null char.)
01	1	SOH (Start of Header)
02	2	STX (Start of Text)
03	3	ETX (End of Text)
04	4	EOT (End of Transmission)
05	5	ENQ (Enquiry)
06	6	ACK (Acknowledgment)
07	7	BEL (Bell)
08	8	BS (Backspace)
09	9	HT (Horizontal Tab)
0a	10	LF (Line Feed)
0b	11	VT (Vertical Tab)
0c	12	FF (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	l

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)

Sample Symbols

UPC-A



12345678905

Interleaved 2 of 5



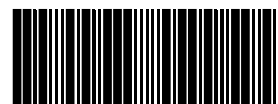
12345678

Code 128



12345678

Straight 2 of 5Industrial



123456

Matrix 2 of 5



6543210

Micro PDF417



Code 93



CODE93

GS1DataBar



0100123456789012

PDF417



12345678

Codabar



BC321

Aztec



12345678

Data Matrix



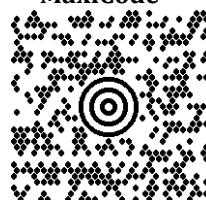
Test Symbol

QR Code



01234567

MaxiCode



Test Message

Programming Charts



(K0K.)
0



(K1K.)
1



(K2K.)
2



(K3K.)
3



(K4K.)
4



(K5K.)
5



(K6K.)
6



(K7K.)
7



(K8K.)
8



(K9K.)
9



(KAK.)
A



(KBK.)
B



(KCK.)
C



(KDK.)
D



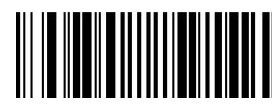
(KEK.)
E



(KFK.)
F



(800002.)
Save



(800000.)
Discard

Note: If an error occurs while scanning a letter or number (before scanning the "**Save**" barcode), scan the "**Discard**" barcode, re-scan the correct letter or number, and then scan the "**Save**" barcode.

ASCII conversion of keyboard operation

HEX	DEC	CTRL+X	FUNCTION	
00	0	CTRL+@		
01	1	CTRL+A	Select all	
02	2	CTRL+B	Bold	
03	3	CTRL+C	Copy	
04	4	CTRL+D	Bookmark	
05	5	CTRL+E	Center	
06	6	CTRL+F	Find	
07	7	CTRL+G		
08	8	CTRL+H	History	
09	9	CTRL+I		
0a	10	CTRL+J	Justify	
0b	11	CTRL+K	Hyperlink	
0c	12	CTRL+L		
0d	13	CTRL+M		
0e	14	CTRL+N	New	
0f	15	CTRL+O	Open	
10	16	CTRL+P	Print	
11	17	CTRL+Q	Quit	
12	18	CTRL+R		
13	19	CTRL+S	save	
14	20	CTRL+T		
15	21	CTRL+U		F12
16	22	CTRL+V	Paste	F1
17	23	CTRL+W		F2
18	24	CTRL+X		F3
19	25	CTRL+Y		F4
1a	26	CTRL+Z		F5
1b	27	CTRL+[		F6
1c	28	CTRL+\		F7
1d	29	CTRL+]		F8
1e	30	CTRL+^		F9
1f	31	CTRL+-		F10
7f	32	CTRL+		



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Tel: +86 755-23762089

Website: www.rtscan.net Email: support@rtscan.net

Room555, Floor 5, Dongming Building, Minkang Rd, 518031, Minzhi Street, Longhua District, Shenzhen, China

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