

BS02004

1D Barcode Scanner

Instruction Manual

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Notes

Safety Notes

Please do not dismantle the barcode scanner or place any foreign parts in it to prevent short circuit or circuit damage.

Please do not leave the barcode scanner or battery near fire.

Maintenance Notes

Use a clean wet mop to wipe the outer shell of the barcode scanner.

Store the barcode scanner at the place that is dustless, dry, away from light and strong magnetic area.

If any malfunctions happen, please record the situation, and contact our customer service.

Product Overview

Product Specification

Model	BS02004
Material	PC+TPU
Voltage	DC 5V
Barcode Supported	Codabar, Code 11, Code 128, GS1-128, USPS, FedEx, Code 39, Code 32, Code 93, EAN-8, EAN-13, ISBN, ISSN, MSI, UPC-A, UPC-E, IATA 25, Industrial 25 / Standard 25, Interleaved 25, Matrix 25, China Postal Code, Plessey, Telepen
Resolution	3mil
Scan Method	Auto/Manual
Lowest Contrast	20%
Decoding Angle	Turning Angle 30 ° , Elevation Angle 75 ° , Deflection Angle 80°
Bluetooth Communication	2.402GHz~2.480GHz

LED Indicator

Indicator Status	Explanations
Green LED flashes once	Successful scanning and data is uploaded
Blue LED is on	Under setup mode

Buzzer

Sounds	Explanations
One short high-note sound (100ms)	Successful scanning
Two or more long high-note sound (800ms)	The USB is under configuration
Three-note chord (volume from low to high)	Enter setup mode (blue LED lit) Exit setup mode (blue LED off)
Two short sounds (volume	Indicate correct settings

from low to high)	
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Barcodes Supported




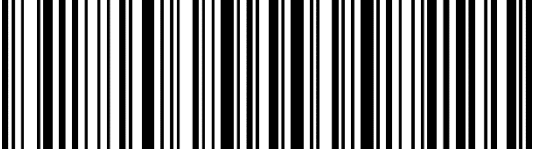
The barcode types supported by the BS02004 can be found in the chart below. For more details, please refer to the barcode type setting in Barcode Type Setting.

Barcodes Supported		Preset
Codabar		Enabled
Code 11		Disabled
Code 128		Enabled
GS1-128 (UCC/EAN-128)		Enabled
USPS		Enabled
FedEx		Enabled
Code 39		Enabled
Code 32		Disabled
Code 93		Enabled
EAN-8		Enabled
EAN-13		Enabled
ISBN		Disabled
ISSN		Disabled
MSI		Disabled
UPC- A		Enabled
UPC- E		Enabled
2 of 5 barcodes	IATA 2 of 5	Disabled
	Interleaved 2 of 5	Enabled
	Matrix 2 of 5	Disabled
	Standard 2 of 5 / Industrial 2 of 5	Disabled

How to Set up the Scanner

You may change the settings of BS02004 barcode scanner by reading the setting barcode in this manual. The examples of settings for the BS02004 scanner are as below.

Note: If there is a (*) before a certain setting barcode in this manual, it indicates the factory preset.

Steps	Operation	
1	Toggle the switch to "ON" and short press the scan button to power on the scanner	
2	Scan the barcode to enter setup mode  Enter Setup	
3	Read the setting barcode, such as:  Enable Codabar	
4	Read the barcode to exit setup mode.  Exit and Save	To clear a wrongly scanned setting barcode, read the barcode below.  Exit without Save



Enter Setup

Basic Settings

System Setting

The BS02004 is compatible with Windows, Android, Mac OS, and iOS operating systems. The default compatible systems are Windows and Android. You may scan the barcodes below to set the operating system you want to work with.

Note: If you want to use the BS02004 with an Android device, please use the Gboard input method, and set the scanner as "Windows/Android Mode" and the input keyboard as "American Keyboard". The barcode scanner supports Gboard input method and will not be affected by the language setting of the Gboard input method.



(*) Windows/Android Mode



Mac OS/iOS Mode

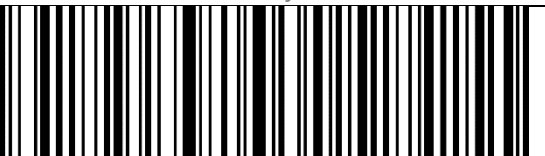
Keyboard Setting



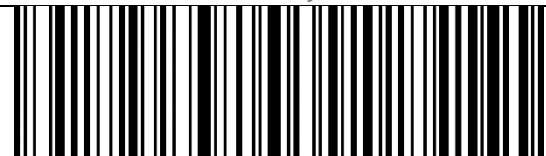
(*) US Keyboard



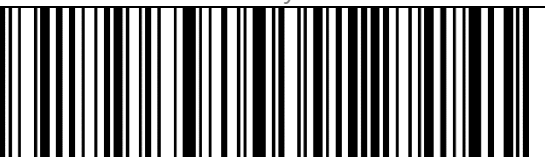
German Keyboard



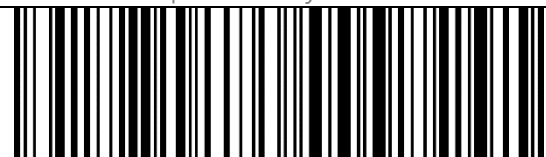
French Keyboard



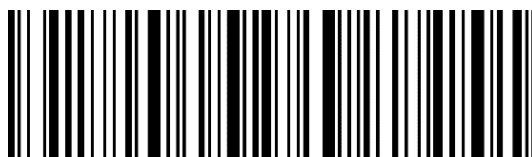
Spanish Keyboard



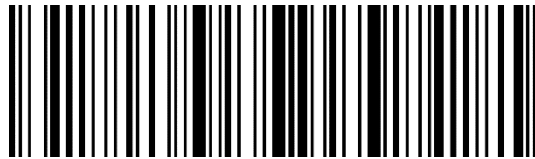
Italian Keyboard



UK Keyboard



Exit and Save



Enter Setup



Japanese Keyboard (Roman Character)

Canadian Keyboard

Serbian Keyboard

Write to Custom Defaults

You may change factory defaults and customize some functions suitable for your own applications when using your scanner. You need to scan 'Enter Setup' → 'Function setup barcode you want to customize (e.g.: Output Code ID)' → "Write to Custom Defaults" in turn.

If you have reconfigured the scanner and want to restore to its custom setting mode, you may scan the "Enter Setup" - "Restore to Custom Defaults" barcodes as below. The barcode scanner will exit the setup mode after restoring to custom defaults.

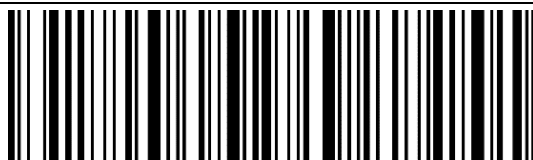


Restore Factory Setting

You may use the "Restore Factory Setting" under the circumstances below:

1. Wrong configuration on the barcode scanner or failure to read barcodes.
2. Previous settings are forgotten while users do not want them to affect future barcode scanning.
3. To restore to initial setting after the use of some rarely used configuration.

Scan the "Enter Setup" - "Restore Factory Setting" barcodes in turn. There is no need to read the "Exit and Save" barcode.

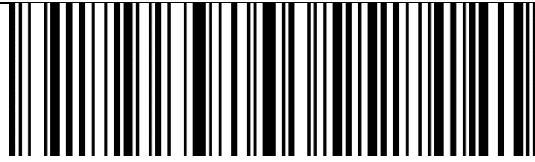


Exit and Save



Enter Setup

Note:If you have restored factory settings for the barcode scanner, the data stored under inventory mode will be cleared.

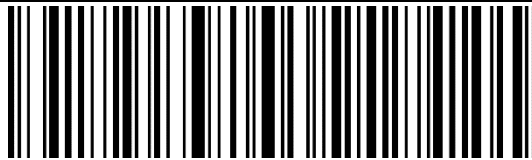


Restore Factory Setting

Reveal Software Version Number

Scan the barcode "Enter Setup" - "Reveal Software Version Number". The software version number will be output to the device connected with the BS02004.

The "Reveal Software Version Number" function is a kind of setting, so you need to scan the "Exit and Save" barcode after getting the software version number revealed.



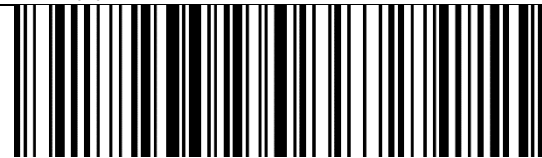
Reveal Software Version Number

Data Transmission Speed

The product defaults working under high-speed transmission mode. By default, the data transmission interval is 0ms, which can improve your working efficiency. If you want to use the product with some low-speed software (like the Excel on Android phones), please adjust the data transmission interval accordingly, as the issue of data loss or garbled characters can happen if the interval is too short.



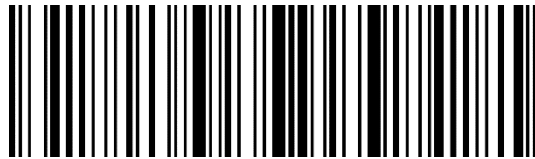
(*) Set Data Transmission Interval as 0ms




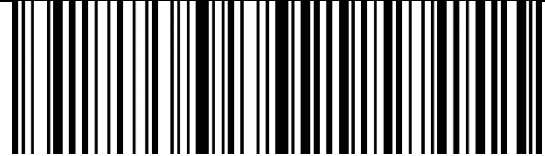

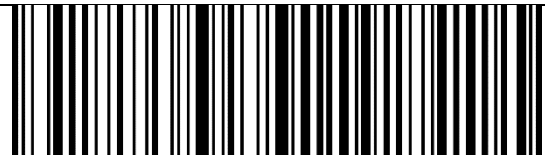
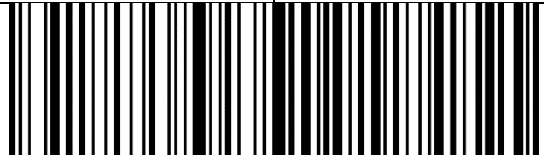
Set Data Transmission Interval as 16ms



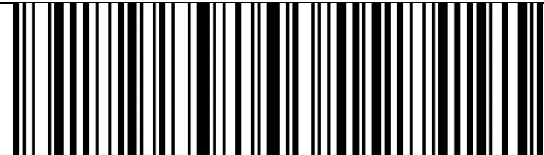
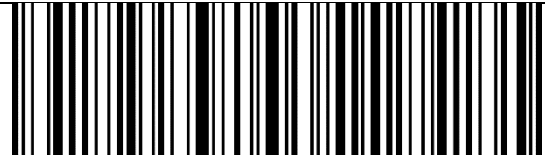
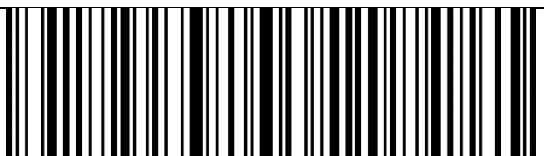
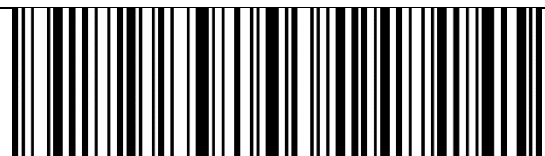
Exit and Save



Enter Setup

 Set Data Transmission Interval as 32ms	 Set Data Transmission Interval as 64ms
 Set Data Transmission Interval as 96ms	 Set Data Transmission Interval as 128ms
 Set Data Transmission Interval as 256ms	

Volume Control

 Silent	 Low Volume
 (* Medium Volume	 High Volume

Scanning Mode

Auto Red Light Shut off Mode

Auto red light shut off mode is the default mode. When under this mode, the red light will not become lit unless you press the scan button. If no barcode is scanned, the red light will stay on for some time which can be set as 1s, 2s, 3s, 5s



Exit and Save



Enter Setup

or 50s (2s is the default setting), and then go off. If the barcode is successfully scanned, the red light will go off immediately.

For example: to set the scan mode as "Auto Red Light Shut off" and the shut off time as 1s.

1. Scan the "Enter Setup" barcode.
2. Scan the "Auto Red Light Shut off Mode" barcode.
3. Scan the "Auto Red Light Shut off Time Setting" barcode.
4. Scan the "1s" barcode.
5. Scan the "Exit and Save" barcode.

(*) Auto Red Light Shut off Mode	Auto Red Light Shut off Time Setting
1s	(*)2s
5s	50s

Consecutive Scanning Mode

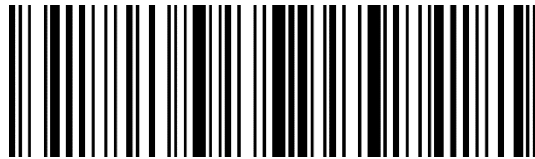
You don't need to push the button to trigger scanning under this mode. The red LED is on automatically and ready to scan a barcode. If no barcodes are scanned, the red LED will stay on. After a successful scanning, the red LED goes off first and becomes lit again automatically.

To adjust the scanning intervals, please follow the steps below:

For example: to set the scanning mode as "Consecutive Scanning Mode" and set the "Consecutive Scanning Interval" as 1s.

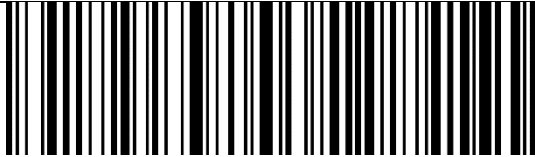


Exit and Save

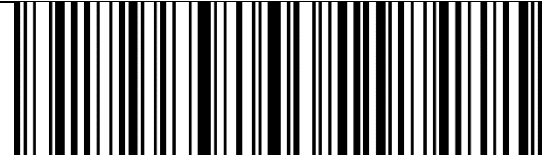


Enter Setup

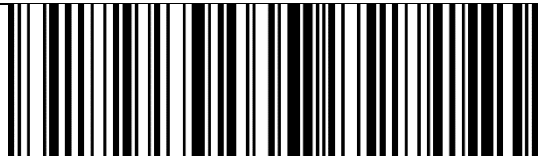
1. Read the "Enter Setup" barcode.
2. Read the "Consecutive Scanning Mode" barcode.
3. Read the "Consecutive Scanning Interval Setting" barcode.
4. Read the "1s" barcode.
5. Read the "Exit and Save" barcode.



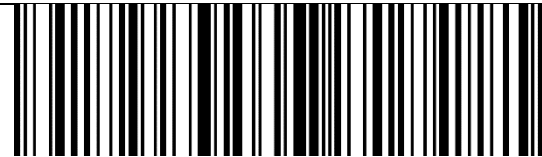
Consecutive Scanning Mode



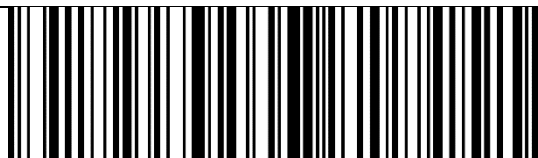
Consecutive Scanning Interval Setting



400ms



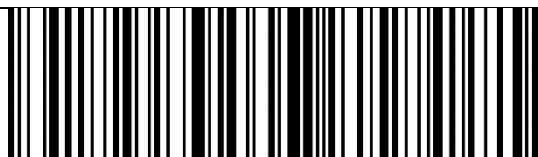
800ms



1s



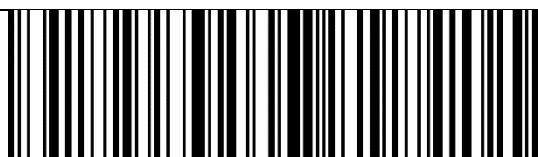
(*) 2s



3s



5s



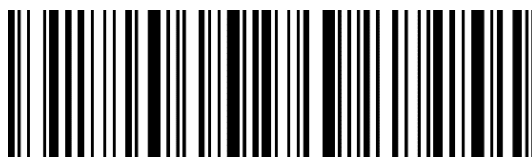
10s



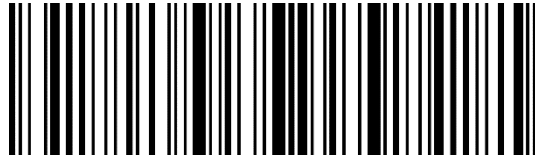
15s

Manual Scanning Mode

When under the manual scanning mode, a red-light beam will appear when you press the scan button which indicates the scanner is ready to scan barcodes. The red light will not go off until one of the situations below occurs.

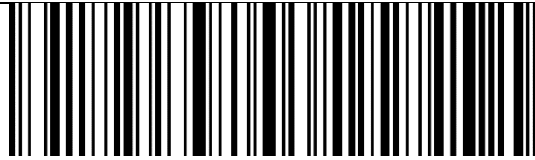


Exit and Save



Enter Setup

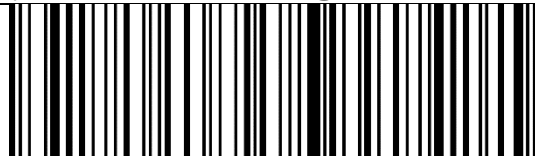
1. Read a barcode successfully
2. Release the scan button



Manual Reading Mode

Hands-free Scanning Mode

When under the hands-free scanning mode, the red light won't go off when the scanner reads a barcode successfully. Each barcode will be read only once no matter how long it exposes under the red light.



Hands-free Mode



Exit and Save

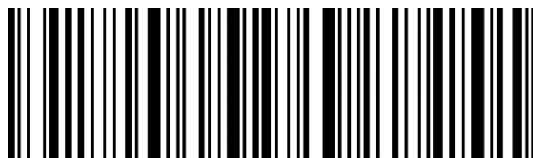


Enter Setup

Connection

Wire USB Mode

If you have connected the BS02004 with your computer via the USB cable, the BS02004 will prioritize using the USB data transmission mode.







Exit and Save



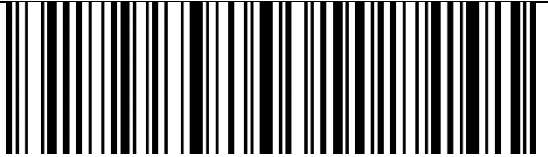
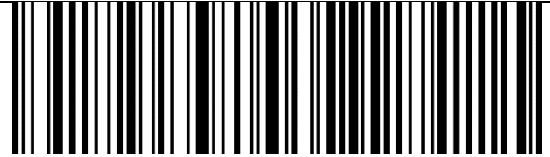
Enter Setup

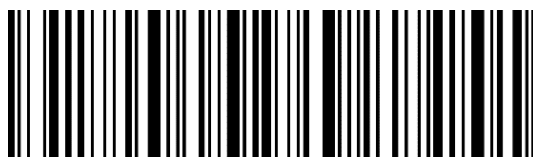
Barcode Settings

Codabar

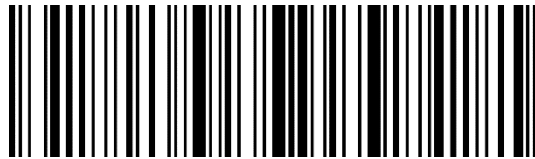
Enable/Disable Codabar	
	
(*) Enable Codabar	Disable Codabar
Transmit START/STOP Characters	
	
(*) Enable Codabar START/STOP Characters	Disable Codabar START/STOP Characters

Code 11

Enable/Disable Code 11	
	
Enable Code 11	(*) Disable Code 11
Checksum Code	
<p>Data in a Code 11 barcode may not include the checksum code. If there is, the checksum code is the last one or two digit(s) of the data output. The checksum code is the value added from all data collected, to check if the data is correct.</p> <p>After you set the "Code 11 without Checksum" function, the scanner can recognize all Code 11 barcodes normally. The scanner defaults the "Code 11 without Checksum" setting.</p>	



Exit and Save



Enter Setup

After you set the "Code 11 with 1-digit Checksum" function, the scanner will take the last one digit of the data as checksum and won't be able to read Code 11 without checksum or Code 11 with 2-digit checksum.

After you set the "Code 11 with 2-digit Checksum" function, the scanner will take the last two digits of the data as checksum and won't be able to read Code 11 without checksum or Code 11 with 1-digit checksum.

After you set the "Transmit Code 11 Checksum" function, the scanner will take the last 1 or 2 digit(s) of the regular data as the checksum to transmit. The scanner defaults the "Code 11 Transmit Checksum" setting.

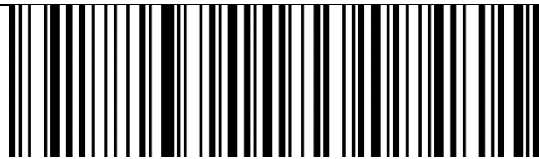
Scan the "Do not Transmit Code 11 Checksum" barcode and the scanner won't transmit the checksum.



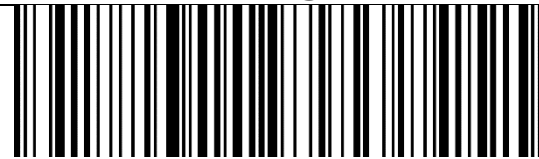
(*) Code 11 without Checksum



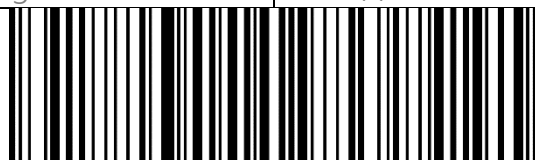
Code 11 with 1-digit Checksum



Code 11 with 2-digit Checksum



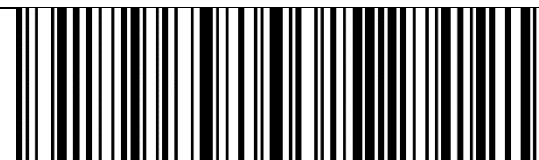
(*) Transmit Code 11 Checksum



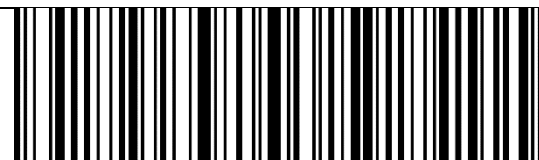
Do not Transmit Code 11 Checksum

Code 128

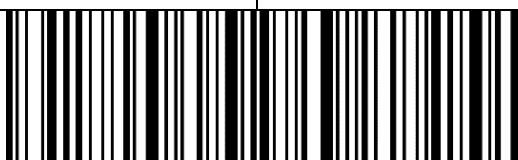
Enable/Disable Code 128



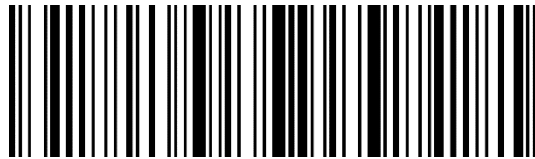
(*) Enable Code 128



Disable Code 128



Exit and Save



Enter Setup

GS1-128 (UCC-128/EAN-128)

Enable/Disable GS1-128 (UCC-128/EAN-128)	
Enable GS1-128	(*) Disable GS1-128

USPS and FedEx Barcode

Enable/Disable USPS and FedEx Barcode	
(*) Enable USPS and FedEx Barcode	Disable USPS and FedEx Barcode

Code 39

Enable/Disable Code 39	
(*) Enable Code 39	Disable Code 39
Transmit START/STOP Character	
Enable Code 39 START/STOP Character	(*) Disable Code 39 START/STOP Character
Checksum Code	
The data in a Code 39 may not contain the checksum code. If there is, the	



Exit and Save



Enter Setup

checksum code is the last character of the data. The checksum code is the value added from all data collected, to check if the data is correct.

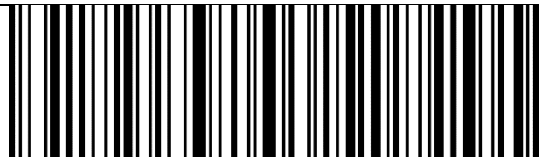
After you set the "Code 39 without Checksum" function, the scanner will recognize all Code 39 normally. The scanner defaults enabling "Code 39 without Checksum".

After you set the "Enable and Transmit Code 39 Checksum", the scanner will take the last digit of the Code 39 data output as checksum and transmit it as normal data collected but won't be able to recognize Code 39 without checksum.

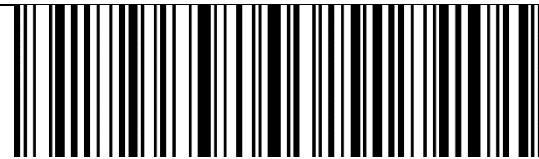
After you set the "Enable but Do not Transmit Code 39 Checksum" function, the scanner will take the last digit of the Code 39 output as checksum but won't transmit it. And it won't be able to read Code 39 without checksum.



(*) Code 39 without Checksum

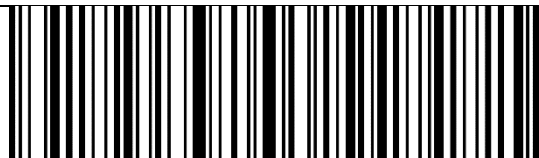


Enable and Transmit Code 39
Checksum



Enable but Do not Transmit Code 39
Checksum

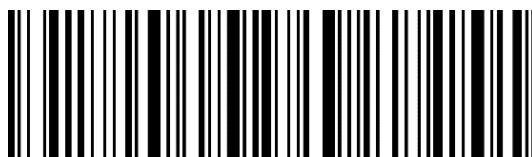
ASCII Code Recognition Range Setting



Enable All Code 39 ACSII Character



Disable All Code 39 ASCII character

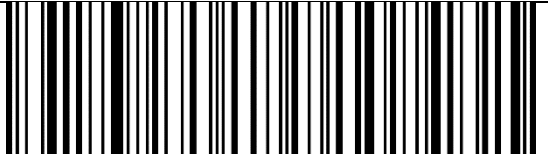
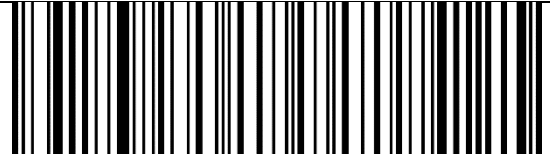


Exit and Save

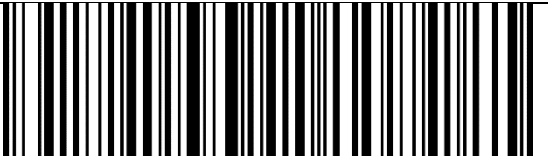
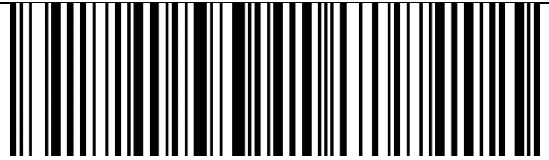




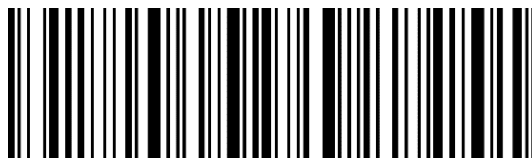
Enter Setup

VIN (Vehicle Identification Number)

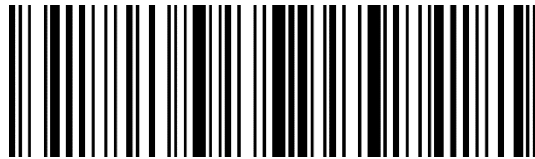
Enable/Disable Code 39 VIN (Vehicle Identification Number)	
	
Enable VIN	(* Disable VIN

Code 32

Enable/Disable Code 32	
Code 32 is a special form of Code 39 that's applied to Italian medical products. The BS02004 defaults disabling Code 32.	
	
Enable Code 32	(* Disable Code 32
The fixed initial character of a Code 32 is "A". The BS02004 supports the function of enabling or disabling the initial character, and defaults disabling it.	
	
Enable Initial Character Output "A"	(* Disable Initial Character Output "A"



Exit and Save



Enter Setup

Code 93

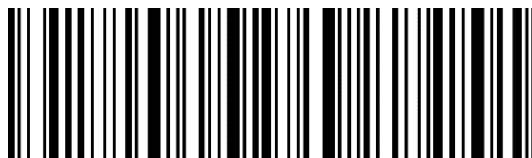
Enable/Disable Code 93	
(*) Enable Code 93	Disable Code 93

EAN-8

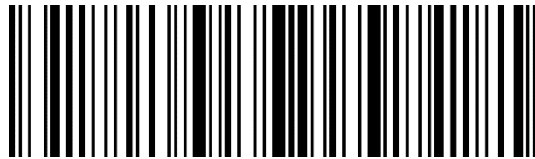
Enable/Disable EAN-8	
(*) Enable EAN-8	Disable EAN-8
Checksum Code	
(*) Transmit EAN-8 Checksum Code	Do not Transmit EAN-8 Checksum Code

EAN-13

Enable/Disable EAN-13	
(*) Enable EAN-13	Disable EAN-13



Exit and Save



Enter Setup

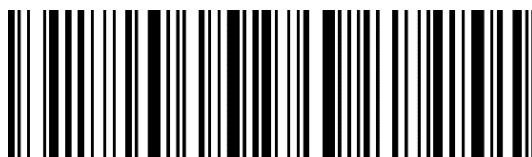
Checksum Code	
(*) Transmit EAN-13 Checksum	Do not Transmit EAN-13 Checksum

ISBN

Convert EAN-13 into ISBN	
You may decide whether to convert EAN-13 into ISBN. The scanner won't convert EAN-13 into ISBN by default.	
Convert EAN-13 into ISBN	(*) Do not Convert EAN-13 into ISBN
Convert EAN-13 into ISSN	
You may decide whether to convert EAN-13 into ISSN. The scanner disables the conversion by default.	
Convert EAN-13 into ISSN	(*) Do not Convert EAN-13 into ISSN

MSI

Enable/Disable MSI	
Enable MSI	(*) Disable MSI



Exit and Save



Enter Setup

Checksum Code

The MSI barcode contains 1-digit compulsory checksum code. If there is a checksum code, it will be the last 1 or 2 digit(s). The checksum is the value added from all data collected to check if the data input is correct.

After you set the "MSI without Checksum" function, the scanner can recognize all regular MSI barcodes. The default setting is "MSI without checksum".

After you set the "MSI with One-digit Checksum" function, the scanner will take the last digit of the data as the checksum and won't be able to recognize MSI without checksum or with 2-digit checksum. The default setting is "MSI with One-digit Checksum".

After you set the "MSI with Two-digit Checksum" function, the scanner will take the last two digits of the data as the checksum and won't be able to recognize MSI without checksum or with only 1 digit checksum.

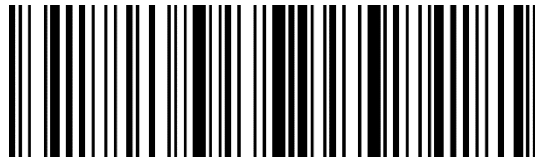
After you set the "Transmit MSI Checksum" function, the scanner will take the last one or two digit(s) of the regular data as the checksum. The default setting is "Transmit MSI Checksum".

After you set the "Do not Transmit MSI Checksum" function, the scanner will no longer transmit MSI checksum.

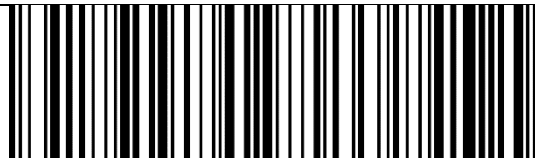
(*) MSI without Checksum	MSI with One-digit Checksum
MSI with Two-digit Checksum	(*) Transmit MSI Checksum



Exit and Save



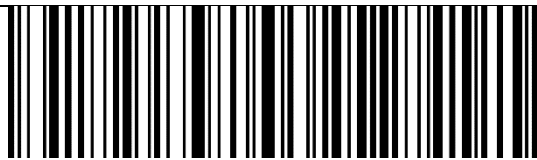
Enter Setup



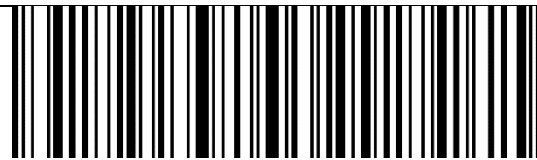
Do not Transmit MSI Checksum

UPC-A

Enable/Disable UPC-A



(*) Enable UPC-A



Disable UPC-A

UPC-A Outputs 0

You may decide whether to add a character "0" to the output of UPC-A. The scanner defaults disabling the 0 output.



UPC-A Outputs 0



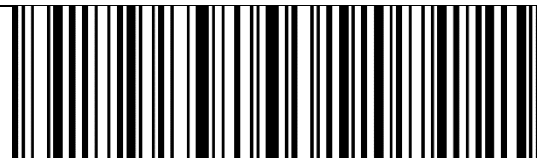
(*) UPC-A Do not Output 0

Checksum Code

You may decide whether to transmit checksum code. The scanner defaults disabling checksum code transmission.



Transmit UPC-A Checksum



(*) Do not Transmit UPC-A Checksum

UPC-A Number System Digit



The first digit of a UPC-A barcode is the number system digit. The scanner default enabling the output of number system digit. You may disable it as per your needs.



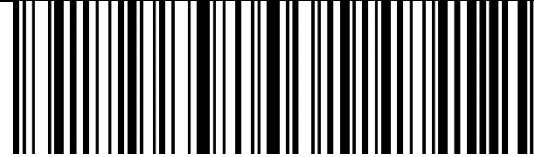
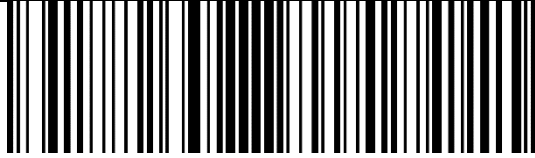


Exit and Save

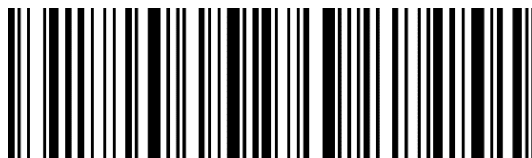


Enter Setup

 (*) UPC-A Outputs Number System Digit	 UPC-A Do not Output Number System Digit
---	--

UPC-E

Enable/Disable UPC-E	
 (*) Enable UPC-E	 Disable UPC-E
Enable/Disable UPC-E1	
<p>The initial digit of most UPC-E is "0". If you want to read UPC-E barcodes with initial digit "1", please first enable the UPC-E and then set the "Enable UPC-E1" barcode. The scanner defaults disabling the UPC-E1.</p>	
 Enable UPC-E1	 (*) Disable UPC-E1
Enable/Disable Initial Digit of UPC-E	
 (*) Enable Initial Digit of UPC-E	 Disable Initial Digit of UPC-E



Exit and Save



Enter Setup

Convert UPC-E to UPC-A	
Convert UPC-E to UPC-A	(*) Do not Convert UPC-E to UPC-A
Checksum Code	
(*) Transmit UPC-E Checksum	Do not Transmit UPC-E Checksum

IATA 2 of 5

Enable/Disable IATA 2 of 5	
Enable IATA 2 of 5	(*) Disable IATA 2 of 5

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5	
(*) Enable Interleaved 2 of 5	Disable Interleaved 2 of 5



Exit and Save




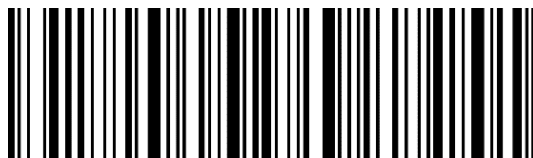
Enter Setup

Matrix 2 of 5

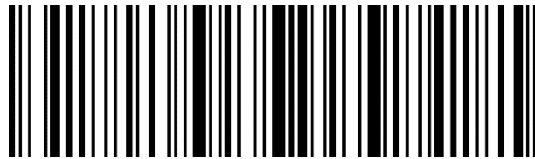
Enable/Disable Matrix 2 of 5	
	
Enable Matrix 2 of 5	(*) Disable Matrix 2 of 5

Standard 2 of 5 / Industrial 2 of 5

Enable/Disable Standard 2 of 5 / Industrial 2 of 5	
	
Enable Standard 2 of 5 / Industrial 2 of 5	(*) Disable Standard 2 of 5 / Industrial 2 of 5



Exit and Save



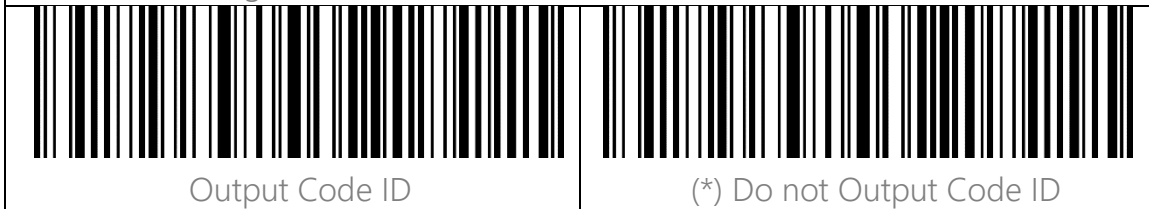
Enter Setup

To Edit Data Format

Code ID

A Code ID character identifies the code type of a scanned barcode. This is useful when decoding more than one code type.

You may decide whether to add code ID in front of a barcode output. The scanner defaults disabling Code ID.



Code ID List

Code Type	Code ID
Code 128	a
EAN-13	b
EAN-8	c
UPC-A	d
UPC-E	e
Code 39	f
Code 93	g
Codabar	h
Interleaved 2 of 5	i
Standard 2 of 5, Industrial 2 of 5	j
Matrix 2 of 5	k
IATA 2 of 5	l
MSI	m
Code 11	n
ISBN	P



Exit and Save



Enter Setup

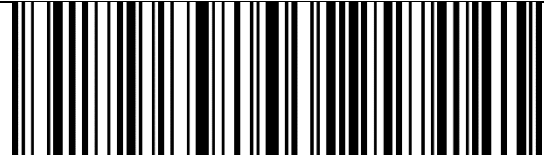
ISSN	q
GS1 128	G

Code End Character Setting

You may decide whether to add a "Enter" after a barcode output. The scanner defaults adding an "Enter" after a barcode.



(*) Add "Enter" after Barcode



Do not Add "Enter" after Barcode

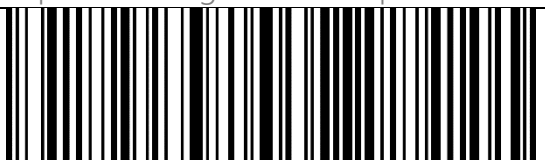
Custom Code Prefix/Suffix Setting

The BS02004 supports customizing 1-32 digit(s) of barcode prefix, and 1-32 digit(s) of barcode suffix. The prefix and suffix can be either shown or hidden. The scanner defaults showing the prefix and suffix. Please refer to the Appendix for the supported prefix/suffix characters.

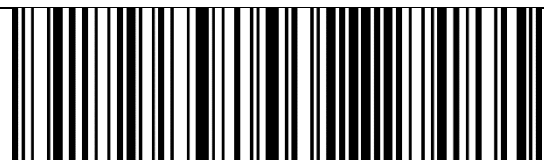
Steps to set the prefix as "#" and the suffix as "D" are as below:

1. Read the "Enter Setup" barcode.
2. Read the "Set Prefix" barcode.
3. Read the "#" barcode in Appendix I.
4. Read the "Set Suffix" barcode.
5. Read the "D" barcode in Appendix I.
6. Read the "Exit and Save" barcode.

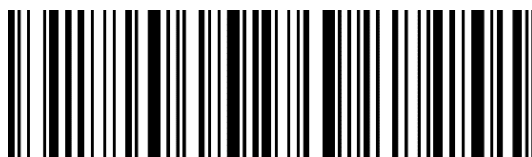
Note: After you successfully set prefix and suffix, the BS02004 will by default output scanning result with prefix and suffix.



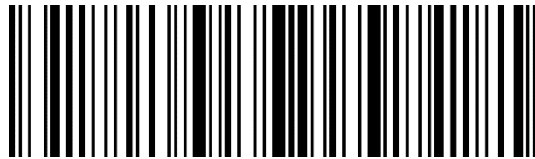
Set prefix



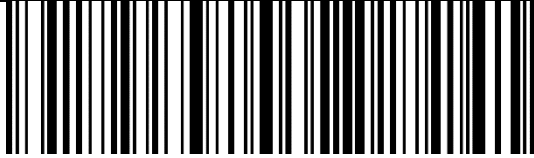
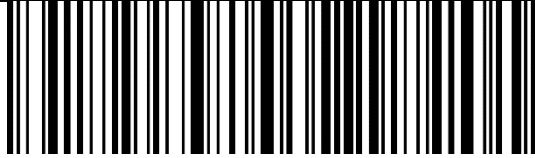
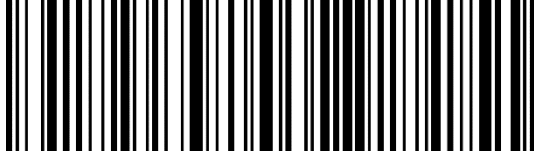

(*)Show prefix



Exit and Save



Enter Setup

 (*)Show suffix	 Set suffix
 Hide prefix	 Hide suffix

Delete Characters on Output Result

When outputting scanning result, the BS02004 supports deleting 0–99 digit(s) front characters and 0–99 digit(s) end characters from a barcode.

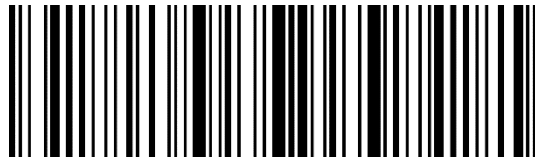
Steps to set deleting front 12-digit characters and end 4-digit characters are as below:

1. Read the "Enter Setup" barcode.
2. Read the "Set the Number of Front Digit(s) to be Deleted" barcode.
3. Scan the "1 Digit" barcode.
4. Scan the "2 Digits" barcode.
5. Scan the "Set the Number of End Digit(s) to be Deleted".
6. Scan the "4 Digits" barcode.
7. Scan the "Exit and Save" barcode.

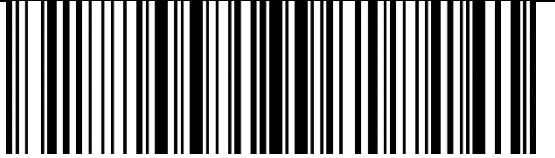

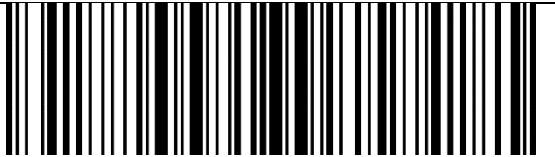
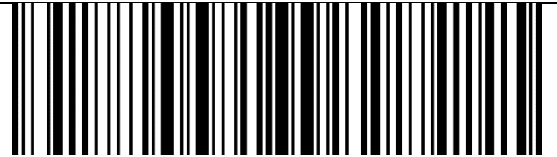
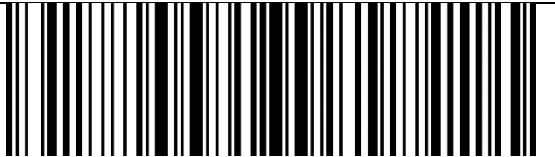
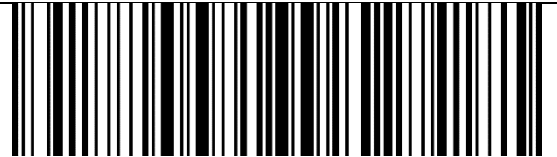
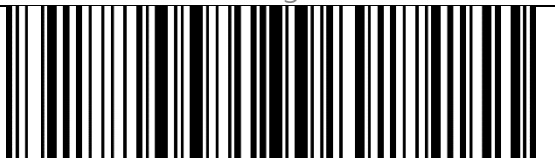
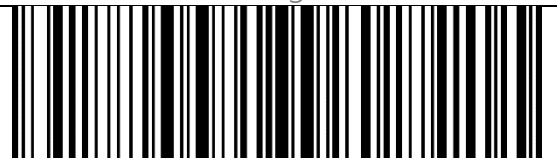
 Set Number of Front Digit(s) to be Deleted	 Set Number of End Digit(s) to be Deleted
 (*) 0 Digit	 1 Digit



Exit and Save

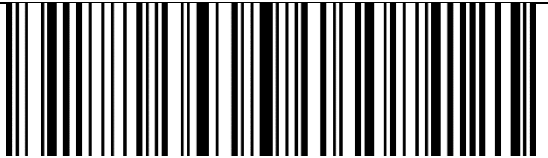
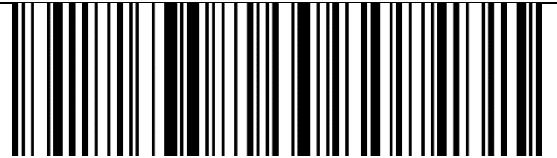
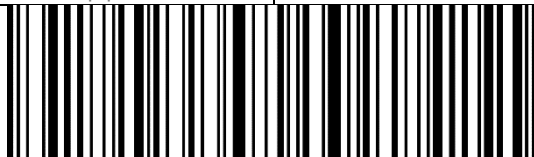


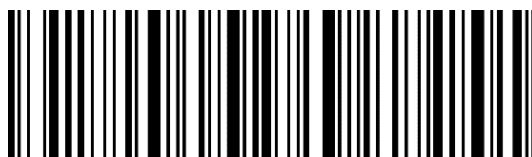
Enter Setup

 2 Digits	 3 Digits
 4 Digits	 5 Digits
 6 Digits	 7 Digits
 8 Digits	 9 Digits

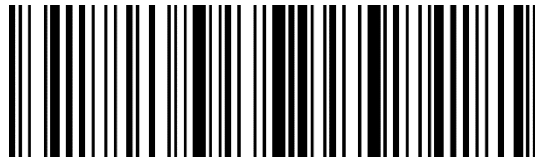
Upper/Lower Case Setting

The BS02004 can convert all letters in a barcode into upper case form, or all into lower case form. The case of letters remains unchanged by default. You may change the setting of the upper and lower case by reading the barcodes below.

 Convert All Letters to Upper Case	 Convert All Letters to Lower Case
 (*) Do Not Convert Letter Case	



Exit and Save



Enter Setup

Additional Code

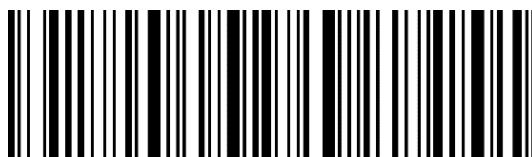
Barcodes like EAN-8, EAN-13, ISBN, ISSN, UPC-A and UPC-E can have additional codes. These additional codes appear on the right of the main code and are shorter than the main code, which can be 2-5 digits. The BS02004 will only read the main code after you disable the additional code.

2-digit Additional Code	
You may decide whether to recognize the 2-digit additional code by set this function that is applicable to EAB-8, EAN-13, ISBN, ISSN, UPC-A, and UPC-E. The BS02004 defaults disabling the recognition of 2-digit additional code.	
Enable 2-Digit Additional Code	(*) Disable 2-Digit Additional Code
5-digit Additional Code	
You may decide whether to recognize the 5-digit additional code by setting this function which is applicable to EAN-8, EAN-13, ISBN, ISSN, UPC-A and UPC-E. The scanner defaults disabling the recognition of 5-digit additional code.	
Enable 5-digit Additional Code	(*) Disable 5-digit Additional Code

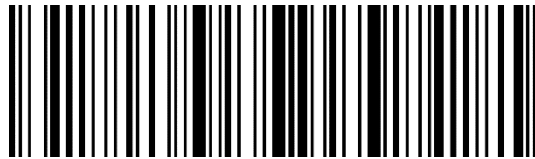
Mode of Recognition Only for Barcodes with Additional Code

The scanner can only recognize the barcodes with additional code if you set the mode as "Recognition Only for Barcodes with Additional Code".

The scanner can recognize the barcodes without additional code if you set the mode as "Recognition Not Only for Barcodes with Additional Code".



Exit and Save



Enter Setup

 <p>Recognition Only for Barcodes with Additional Code</p>	 <p>(*)Recognition Not Only for Barcodes with Additional Code</p>
---	---

Separation Character

You may decide whether to add a separation character "-" between the main code and additional code. This function is applicable to the barcodes with additional code, e.g., ISBN code, and ISSN code.

 <p>Add Separation Character</p>	 <p>(*) Do not Add Separation Character</p>
---	---

Caps Lock Control

When using the BS02004 on a Windows system, the content of a barcode may change with the status of the caps lock key. To avoid errors caused by such change, you may enable the "Rid Barcode of Caps Lock Control".

 <p>(*) Caps Lock Control Barcode</p>	 <p>Rid Barcode of Caps Lock Control</p>
--	--

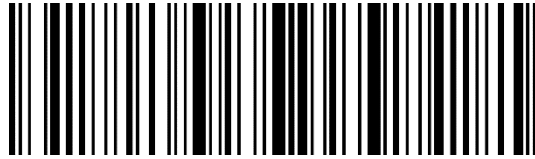
Read Code with Specific Initial Characters Only

Under this mode you may set 1-6 digits as initial characters, and the scanner will only recognize the barcodes with these initial characters. Please refer to the Appendix I for the supported characters.

- Steps to enable reading barcodes with initial characters "A" and "6" are as below:
1. Read the "Enter Setup" barcode.
 2. Read the "Set the Special Initial Character" barcode.



Exit and Save



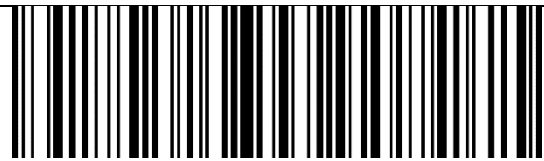
Enter Setup

3. Read the "A" barcode in Appendix I;
4. Read the "6" barcode in Appendix I;
5. Read the "Exit and Save" barcode.

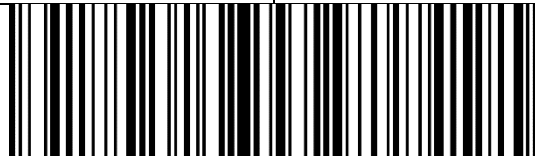
Note: After you set the initial characters by steps above, the BS02004 will only recognize the barcodes with specific initial characters. If you want to disable the function, please read the "Enter Setup" - "Remove the Restriction on Initial Characters" - "Exit and Save".



Set Initial Characters



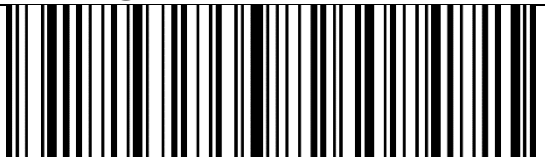
Only Read the Barcodes
with Specific Initial Characters



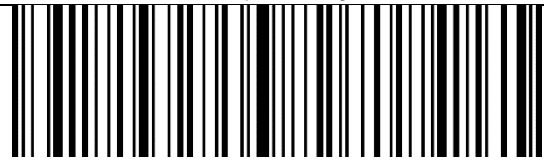
(*) Remove the Restriction on Initial Characters

Read 1D Inverted Barcode

The inverted barcode refers to the 1D barcode with white lines on black ground (The recognition of different inverted 2D barcodes is set separately).



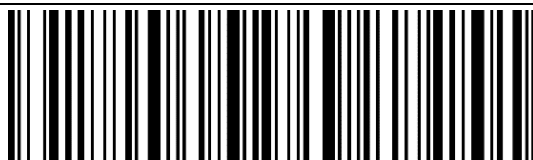
Recognize Inverted Barcode



(*) Do not Recognize Inverted
Barcode

Hide Special Initial Character

Code 128 and Code 39 may contain some special initial characters to indicate some sort of parameter of a product. For example, the character "p" as initial character can indicate "Part Number", and character "Q" can indicate quantity. The BS02004 can hide such initial characters. If the initial characters are set to

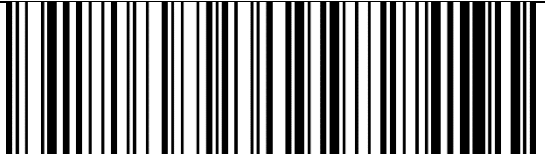


Exit and Save

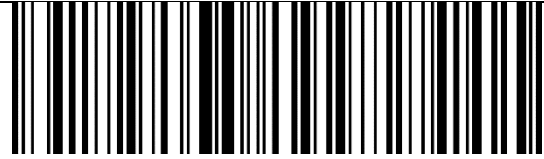


Enter Setup

be hidden, the initial characters for code 128 and code 39 including D, K, P, Q, S, V, 1P, 1T, 10D, 17V, 2P or 4L will be hidden and won't output. "Hide Special Initial Character" function is disabled by default.



Hide Special Initial Character



(* Show Special Initial Character

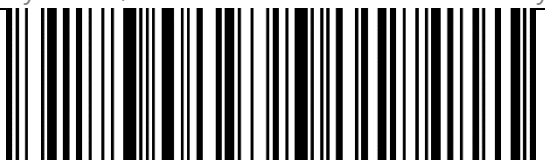
Use of Shortcut Barcodes

There are two types of shortcut barcodes.

Input Type: With these shortcut barcodes you can quickly input some characters. Please refer to Appendix I.

Function Type: These shortcut barcodes work either alone or in combination way. Please refer to the Appendix II and Appendix III.

If the shortcut barcode is enabled and you scan some shortcut barcodes of input type, BS02004 will output corresponding characters. When you scan the shortcut barcodes of function type, BS02004 will simulate the effect on a keyboard, like a standalone function key or combination ones.



Enable Shortcut Barcodes



(* Disable Shortcut Barcodes

Settings of Data Coding Format

To let the host print Chinese data in given code format, you may complete the setting by reading the "Data Coding Format" barcode. The scanner defaults outputting data in GBK coding format.

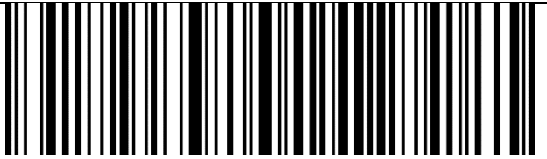
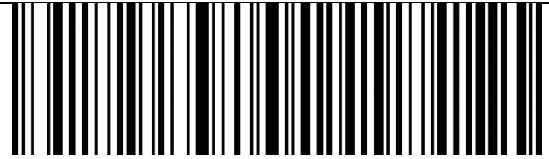
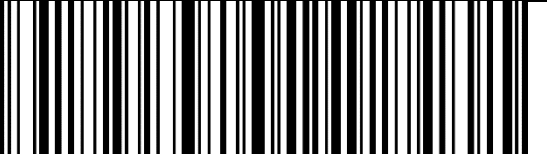
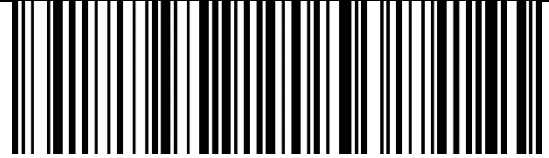
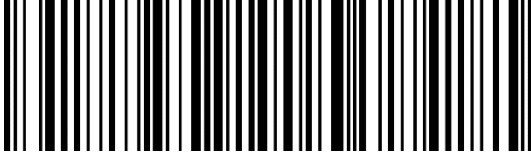
1. Original Data Format, the data coding output format is closely connected with the code generation environment. The output format can be GBK or UNICODE.
2. The GBK (GB2312) is applicable to software like Notepad, Excel, etc.



Exit and Save



Enter Setup

3. The UNICODE is applicable to software like WORD etc.	
	
(*) Original Data Coding Format	GBK Data Coding Format
	
Unicode Data Coding Format	(*) Disable Original and GBK Chinese Character Recognition
	
Enable Original and GBK Chinese Character Recognition	

Replace GS (^]) with Specific Character

The BS02004 supports replacing the GS separation character (^]) with specific characters. The scanner defaults disabling the function.

Steps to set replacing GS separation character with character "A" are as below:

1. Read the "Enter Setup" barcode.
2. Read the "Set the GS Replacement Character" barcode.
3. Read the "A" barcode in Appendix I.
4. Read the "Exit and Save" barcode.

Note: After you complete setting the replacement character by following steps above, the BS02004 will automatically enable the replacing GS with other characters function. If you want to disable the function, please read the "Enter Setup" - "Disable Replacing GS with Other Character" - "Exit and Save" barcodes in turn.

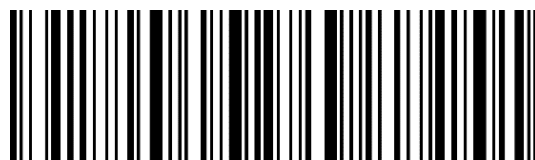


Exit and Save

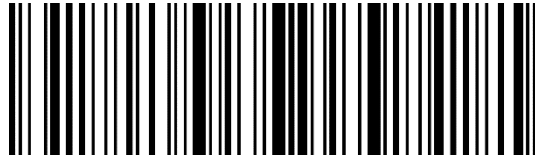


Enter Setup

Set the Replacement Character	Enable Replacing GS with Other Characters
 (* Disable Replacing GS with Other Characters	



Exit and Save



Enter Setup

Appendix I : Characters

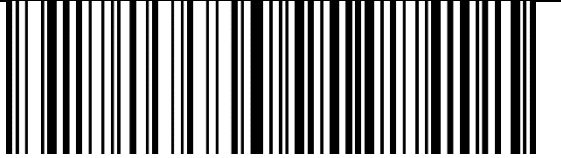
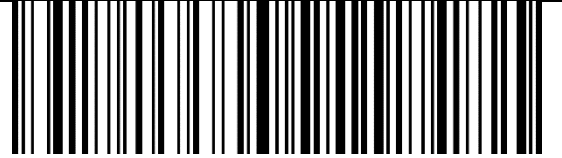
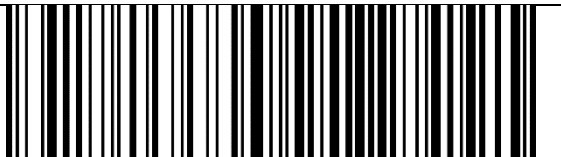
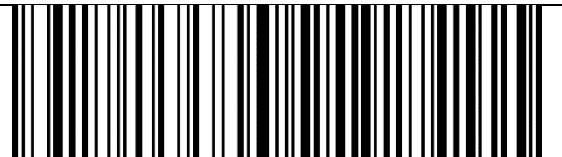
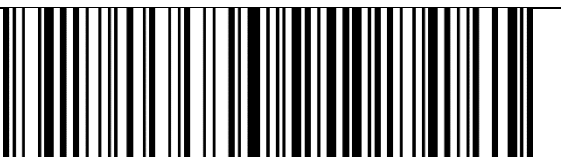
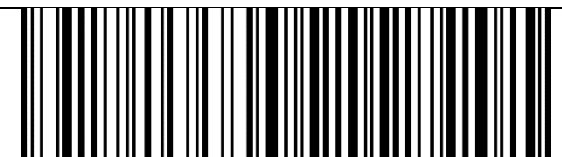
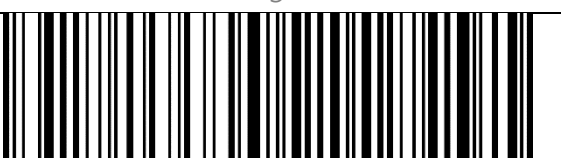
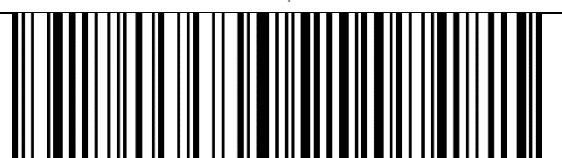
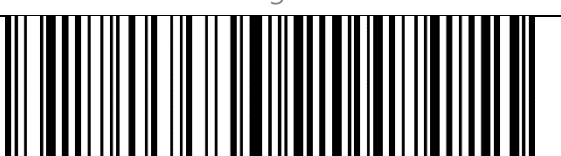
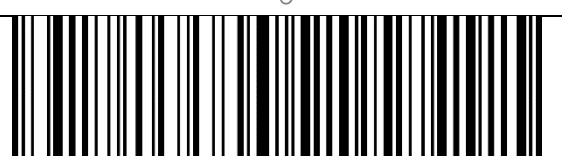

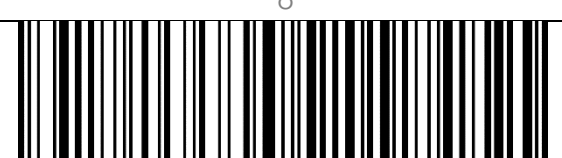


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Exit and Save



Enter Setup

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 7	 8
 9	 :
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Exit and Save



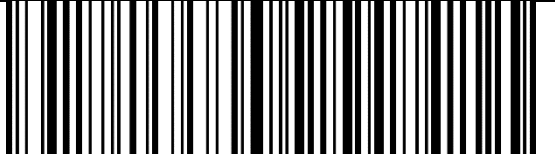
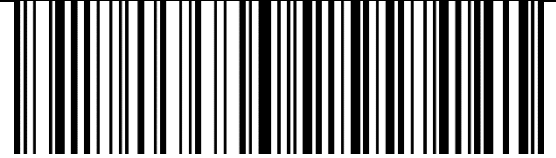
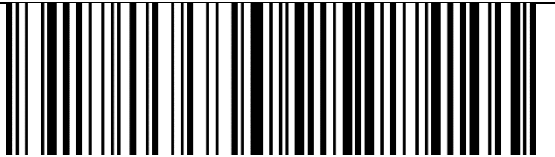
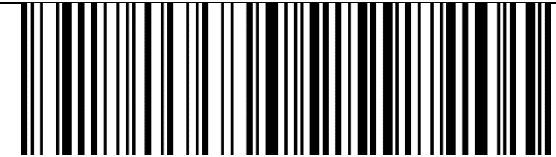
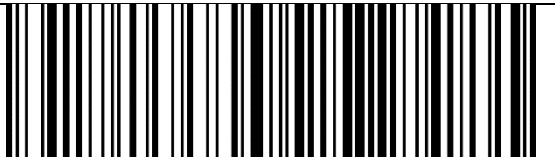
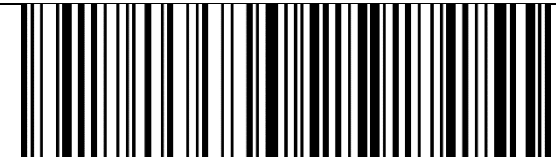
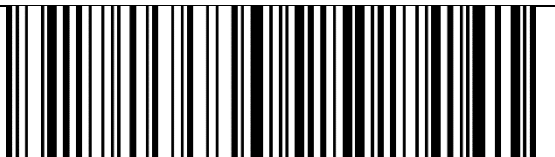
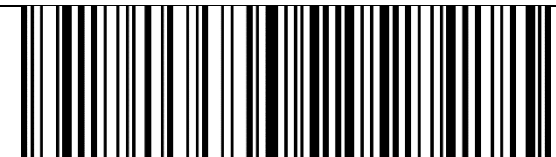
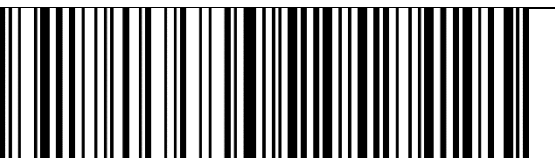
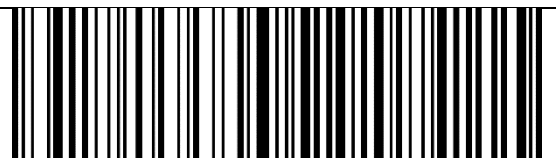
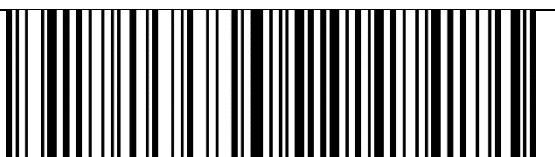
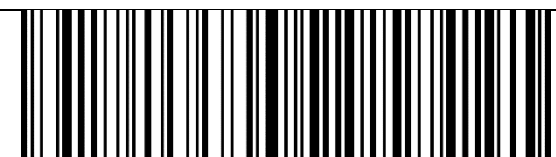
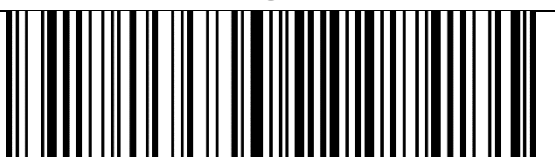
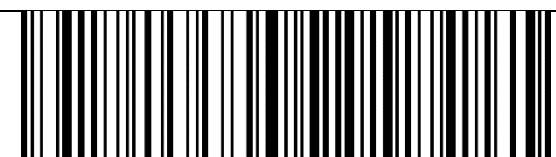
Enter Setup



Exit and Save



Enter Setup


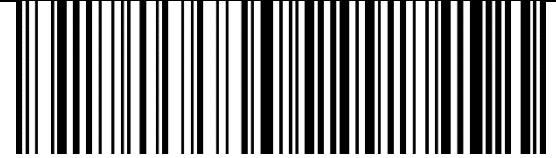
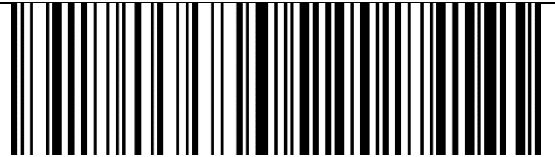
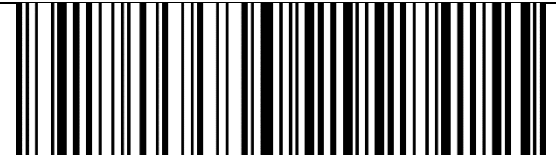
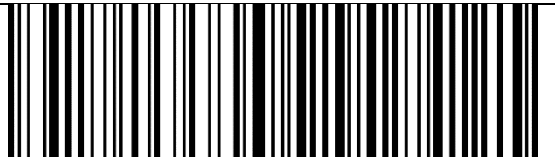
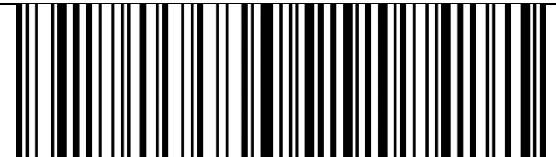

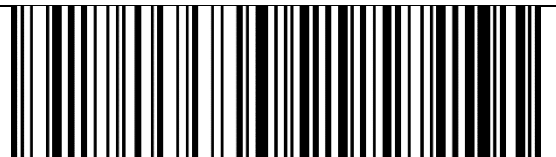
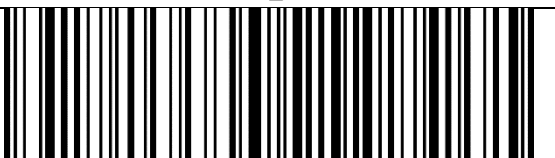
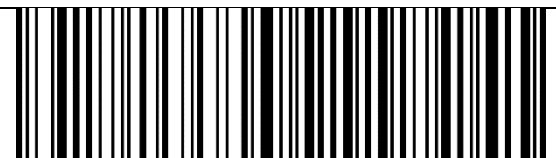
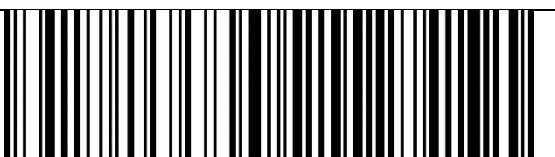
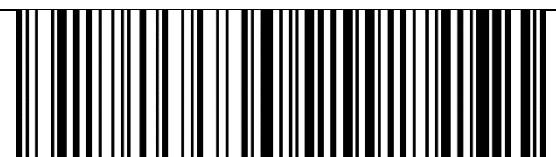
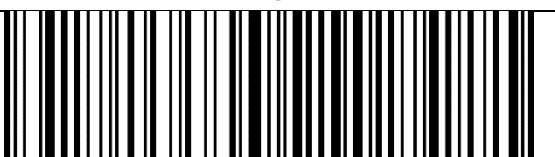

 K	 L
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 S	 T
 U	 V
 W	 X



Exit and Save



Enter Setup


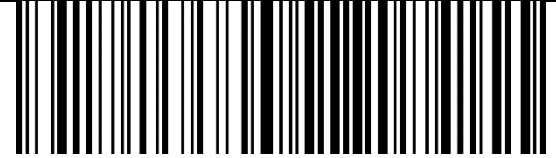
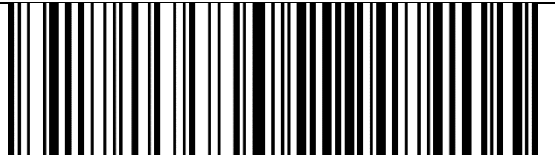
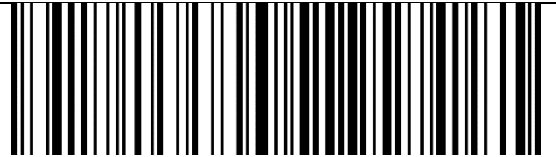
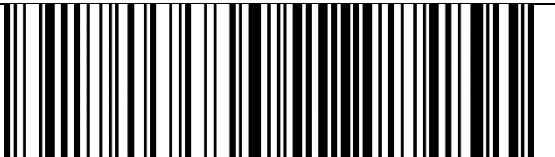

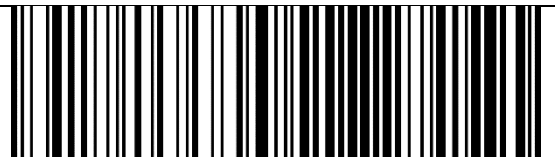
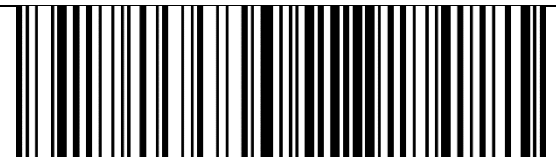
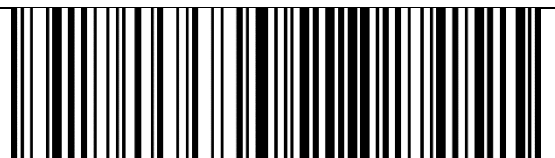
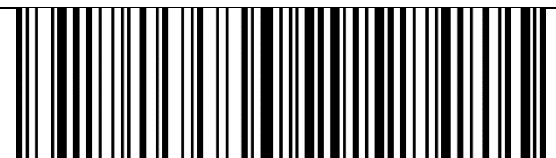
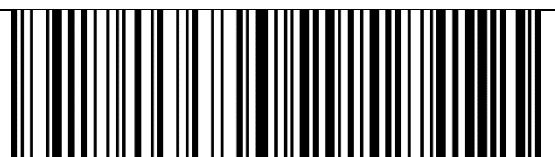
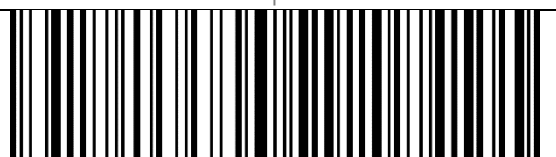
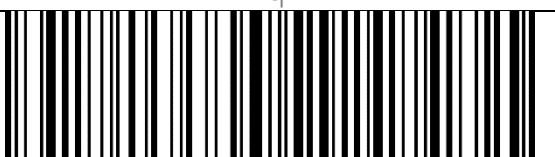
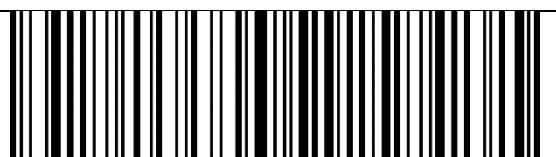
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Exit and Save



Enter Setup



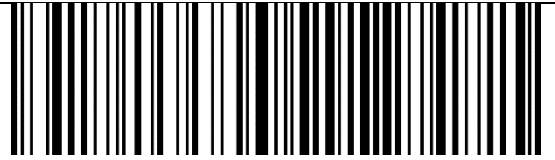
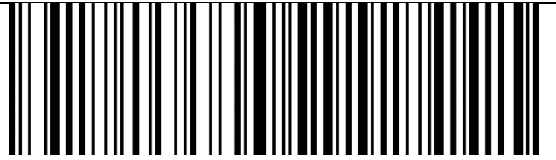
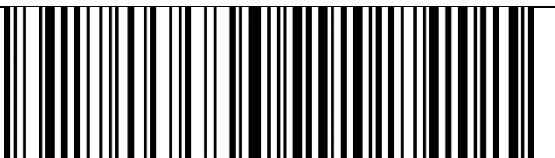
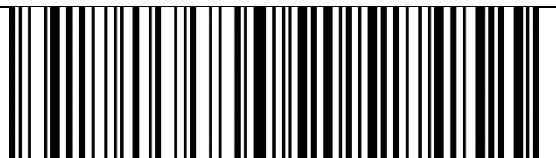
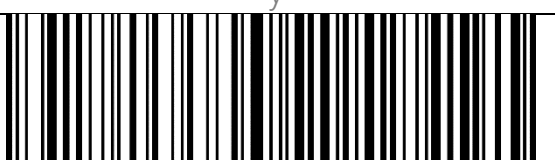
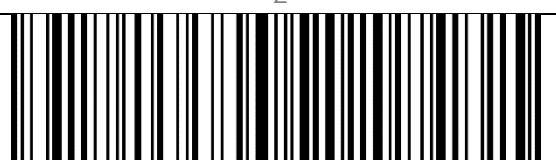
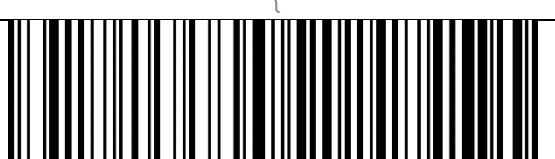
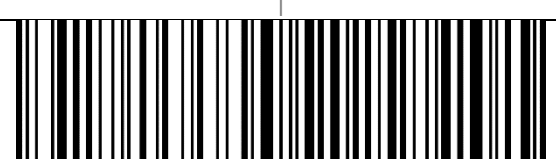
 g	 h
 i	 j
 k	 l
 m	 n
 o	 p
 q	 r
 s	 t



Exit and Save



Enter Setup

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 Y	 Z
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 }	 ~



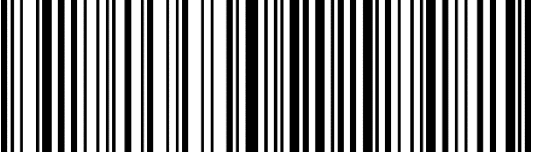

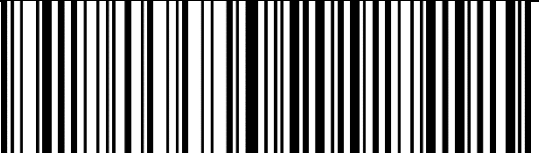

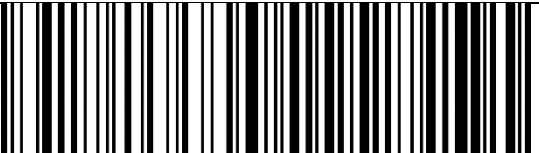
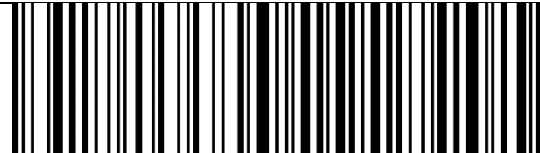
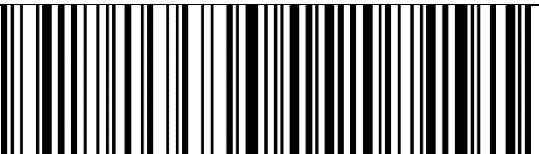

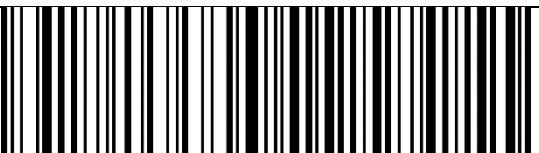
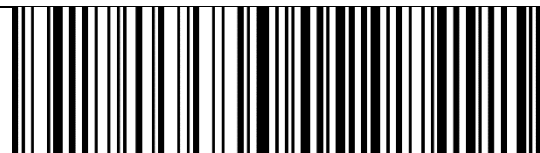
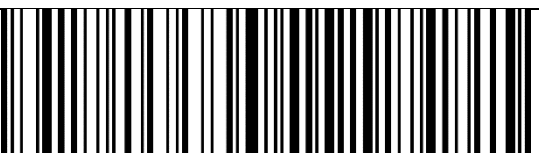
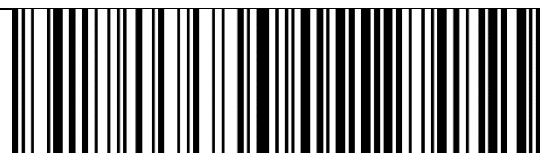


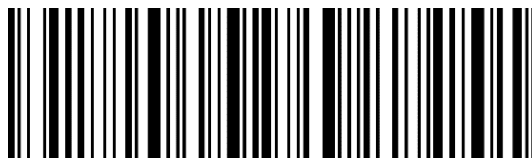
Exit and Save



Enter Setup

Appendix II : Independent Function Key

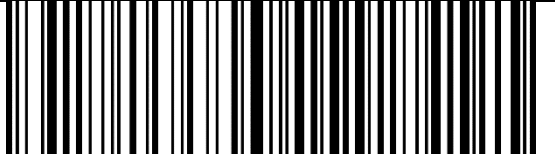

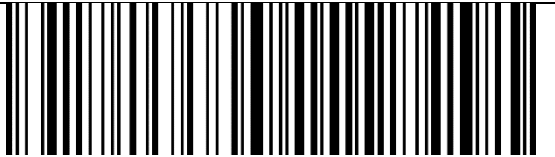
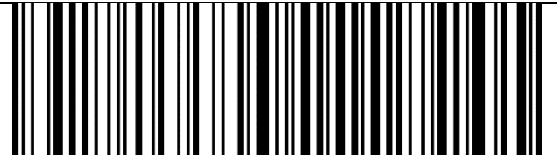
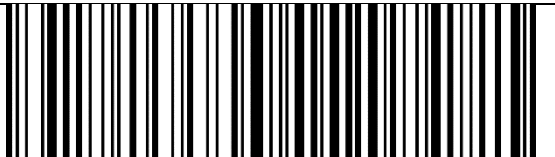
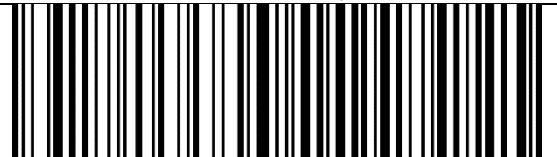

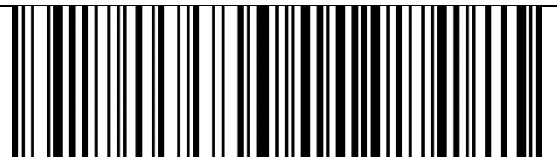
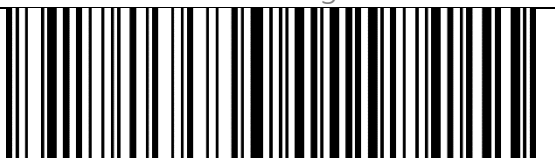
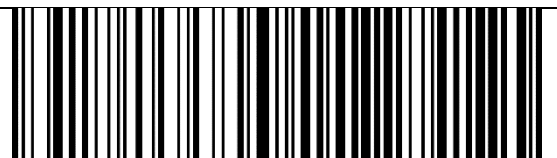
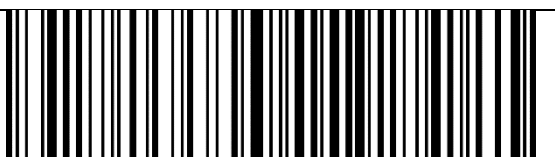
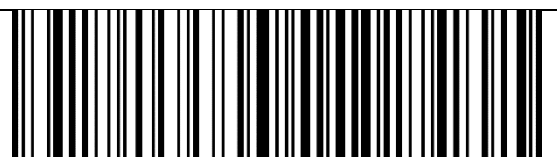
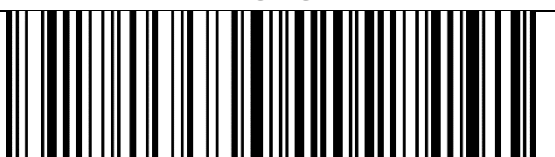
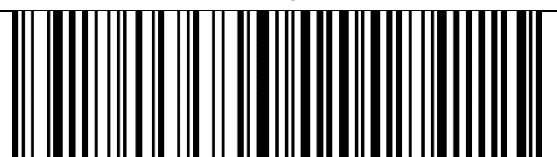
 Enter Key	 Space Key
 F1	 F2
 F3	 F4
 F5	 F6
 F7	 F8
 F9	 F10
 F11	 F12



Exit and Save

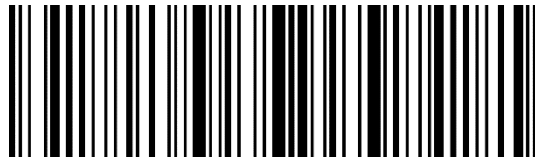


Enter Setup

 Tab	 Backspace
 Delete	 Move Cursor Upward
 Move Cursor Downward	 Move Cursor Leftward
 Move Cursor Rightward	 Ctrl
 Esc	 Insert
 Home	 End
 Page Up	 Page Down





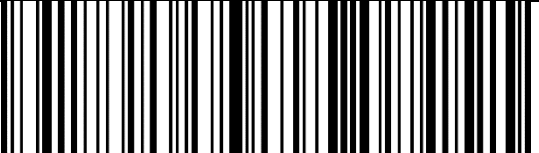

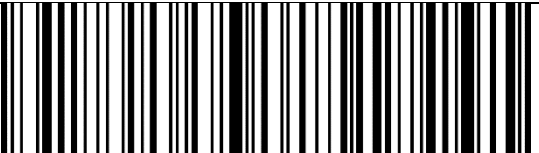
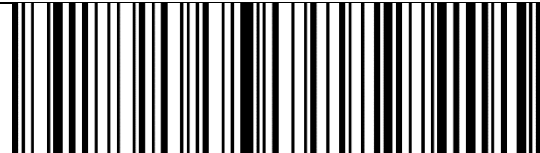



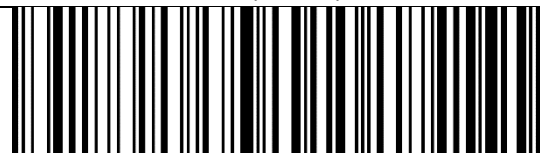
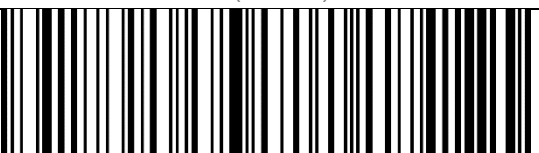
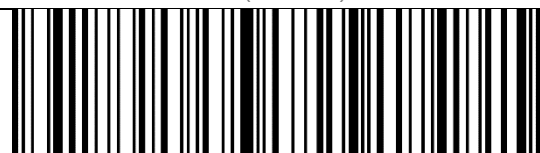


Exit and Save



Enter Setup

Appendix III: Function Key Combinations

 NUL(Ctrl+@)	 SOH(Ctrl+A)
 STX(Ctrl+B)	 ETX(Ctrl+C)
 EOT(Ctrl+D)	 ENQ(Ctrl+E)
 ACK(Ctrl+F)	 BEL(Ctrl+G)
 BS(Ctrl+H)	 HT(Ctrl+I)
 LF(Ctrl+J)	 VT(Ctrl+K)
 FF(Ctrl+L)	 CR(Ctrl+M)



Exit and Save



Enter Setup

 SO(Ctrl+N)	 SI(Ctrl+O)
 DLE(Ctrl+P)	 DC1(Ctrl+Q)
 DC2(Ctrl+R)	 DC3(Ctrl+S)
 DC4(Ctrl+T)	 NAK(Ctrl+U)
 SYN(Ctrl+V)	 ETB(Ctrl+W)
 CAN(Ctrl+X)	 EM(Ctrl+Y)
 SUB(Ctrl+Z)	 ESC(Ctrl+J)



Exit and Save



Enter Setup

FS(Ctrl+W)	GS(Ctrl+)]
RS(Ctrl+^)	US(Ctrl+-)



Exit and Save