

BCST-20  
Barcode Scanner

# Instruction Manual

## **IMPORTANT NOTICE**

### **Safety Precaution**

- \* DO NOT disassemble the scanner, or place foreign matter into the scanner causing a short circuit or circuit damage.
- \* DO NOT expose the scanner or battery to any flammable sources.

### **Maintenances Precaution**

- \* Use a clean cloth to wipe dust off the body of the scanner.
- \* If you find the scanner abnormal, write down the specific scenario and consult the maintenance person.

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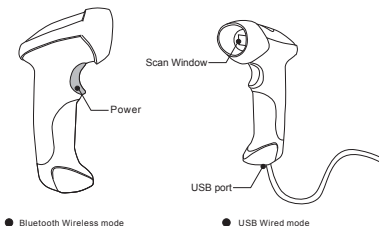
# Overview of BCST-20 Barcode Scanner

## Features of the Scanner

- \* Small size, portable.
- \* Supports three scan modes, including Continuous Mode, Manual Mode, Auto-off Mode.
- \* Supports most popular barcode symbologies.
- \* User feedback via LED indicator and beeper
- \* The voice volume of scan barcode successfully could change via setting barcode.
- \* Provides 256 KB memory for reserve buffer while 2.4Ghz connection interruption, which can store up to 2600 scan barcodes.
- \* Programmable parameters include data output format, editing format, symbologies, etc.

- ★ Abundant decoding symbologies
- ★ Whole body shockproof and drop resistant design
- ★ Proprietary intellectual property rights
- ★ Comfortable operating feel
- ★ Button life up to 3 million times
- ★ 1500mAh large capacity lithium battery
- ★ Long working hours

## Appearance



## Introduction of Key Function

- \* Long press Scan button 3 seconds will turn on the BCST-20 scanner.
- \* Long press Scan button 3 seconds will turn off the BCST-20 scanner.
- \* Flip the Scan button can read the barcodes.

## Specifications

### PHYSICAL CHARACTERISTICS

Material	ABS+TPU
Size	Length 167mm*Width 70mm* Height 85.5mm
Color	White, Black
Power supply	Built-in rechargeable lithium battery
Weight	150g(With battery)

### PERFORMANCE CHARACTERISTICS

Sensor	2500 pixels
Decode Capability	Codabar, Code 11, Code 93, MSI, Code 128, UCC/EAN-128, Code 39, EAN-8, EAN-13, UPC-A, ISBN, Industrial 25, Interleaved 25, Standard 25, 2/5 Matrix
Light Source(Laser)	Laser LED 650+/-20nm
Resolution	5mil
Nominal Working Distance	6~30cm
Decode Rate	200 decodes per second
Scan width	30mm=Scanner Window
Decode mode	Single-Line Aiming
Scan mode	Auto off mode / Manual mode
Print Contrast Minimum	30%
Scan angles	Roll30° Pitch75° Yaw65°
Cylinder Horizontal Scan	Diameter 35mm
Indication	Beeper, LED
Radio Range	10m Visual range
Interfaces Supported	USB

### POWER

Voltage	DC 5V
Laser Safety	Accord with national level two laser safety standards
EMC	CE & FCC DOC Compliance
standby Current	35mA
Operating current	60mA

## USER ENVIRONMENT

Operating Temp.	0 to 50. iC / 32 to 122iF
Storage Temp.	0 to 50. iC / 32 to 122iF
Operating Humidity	20-85% ( non-condensing )
Storage Humidity	20-85% ( non-condensing )
Drop Specifications	Free fall of 1.5m air drop
Accessories	USB receiver, USB data cable, Manual

## Correct Aiming



## Incorrect Aiming



## QUICK START

The setting of the BCST-20 Barcode Scanner can be changed by reading the setup barcodes contained in this manual. This section describes the procedure of setting the BCST-20 Barcode Scanner by reading the setup barcodes and provides some example for demonstration.

**Step 1:** Turn on BCST-20 Barcode Scanner. It will response with a long beep(high tone), it's LED shows red and with Intmt twinkle.

**Note:** How the BCST-20 Barcode Scanner establishes a connection with computer or other compatible device, please refer to Chapter 2.

**Step 2:** Enter the Setting Mode. The BCST-20 Barcode Scanner will response three beeps (tone descending from high to low), and its LED indicator will flash purple.



Enter Setup

**Step 3:** Read a Setup barcode. The BCST-20 Barcode Scanner will response three beeps (tone ascending from low to high), and its LED indicator will flash purple.

**For Example:**



Enable Codabar

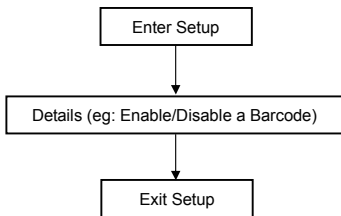
**Step 4:** Exit the Setting Mode. The BCST-20 Barcode Scanner will response three beeps (tone descending from high to low), and its LED indicator will not flash purple and power off.

**Note:** When any setup error occurs, the BCST-20 Barcode Scanner will respond with a long beep (low tone), and its LED indicator will flash purple.



Exit with Save

## Steps of Setup





## Enter the Setting Mode

For the scanner to enter the setting mode, you must have it read the "Enter Setup" barcode, which will be located at the bottom of almost every page of this manual.

The BCST-20 Barcode Scanner will respond with three beeps (tone descending from high to low), and its LED indicator becomes purple and go off quickly after reading the barcode.



Enter Setup

For setting scanner parameters, see "Read a Setup Barcode" below.

## Exit the Setting Mode with Save

For the scanner to exit the setting mode, you must have it read the "Exit with Save" barcode, which will be located at the bottom of almost every page of this manual.

Just like reading the "Enter Setup" barcode, the scanner will respond with three beeps (tone ascending from low to high) after reading the barcode.



Exit with Save

## Exit the Setting Mode without Save

If you want to exit the setting mode without saving any changes, you must have the scanner read the "Exit without Save" barcode.

Just like reading the "Enter Setup" barcode, the scanner will respond with three beeps (tone ascending from low to high) after reading the barcode.



Exit without Save

## Restore Factory Defaults

"Restore Factory Defaults" is a special barcode. The BCST-20 Barcode Scanner will respond with a short beep (high tone) after reading this barcode. At this time, the scanner system could restore factory defaults, and no need to read "Exit with Save" barcode again.



Restore Factory

**Note:** Most of setting mode have restore factory defaults selection. The factory default value for each setting is indicated by an asterisk

"\*".

You could use this barcode at the following status:

- 1. The scanner doesn't work. For example, it can not read barcodes.
- 2. You forget the settings what you did to the scanner before, and you don't want to be affected by the settings when you use the scanner.
- 3. After using a function which is not to be used usually in the scanner.

## Check Software Version

If you want to know the software version of BCST-20, should read the 'Enter Setup' and 'Output Software Version' barcode:



Enter Setup



Output Software Version

Checking the software version is done at the enter setup mode, so after output the software version, need to read 'Exit without Save' barcode.



Exit without Save

# Save Custom Settings

1. You may change factory defaults, and customize some functions suitable for your own applications when you use BCST-20, you must read the 'Enter Setup' Function barcode you want to customize 'Save Custom Settings' 'Exit with Save' barcodes.



Enter Setup



Save Custom Settings



Restore Customs Settings



Exit with Save

2. If you want to restore to custom settings after resetting the barcode scanner, just need to read 'Enter Setup' 'Restore Custom Settings' 'Exit with Save' barcodes as above.

# Chapter 1 Features and Basic Setups

This chapter will introduce the features and usage of the barcode scanner.

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## 1.1 Battery

The scanner is powered by 1500mAh chargeable Lithium batteries. The batteries can support the scanner work continuously for 60 hours, or read 56000 barcodes (read an EAN-13 barcode per 5s).

### 1.1.1 Mounting the battery (charging)

1. Hold the scanner face down in one hand.
2. Insert USB cable for charging.

### 1.1.2 How to operate BCST-20 Barcode Scanner

#### Turn on the scanner

Press the Power key for about 2 seconds. The scanner will respond with a long beep (high tone), and its LED indicator will flash.

#### Turn off the scanner

Press the Power key for about 3 seconds. The scanner will respond with two short beeps (high tone) and the LED indicator will be turned off.

### 1.1.3 Auto Power Off

In order to conserve battery power, the user can specify the time interval for the scanner to automatically turn off. By default, it is set to be 10 minutes.



Enter Auto Power Off



5min



(\*)10min



20min



30min



Exit Auto Power Off

eg.: Set 20 minutes for the scanner to be automatically turn off.

1. Read the "Enter Setup" barcode;
2. Read the "Enter Auto Power Off" barcode;
3. Read the "20min" barcode;
4. Read the "Exit with Save" barcode.

**Note:** If you want to keep the scanner power on all the time, read "Exit Auto Power Off" in stead of step 3 and 4.



Enter Setup



Exit with Save



Exit without Save

## 1.2 Transmit Buffer

During the 2.4Ghz connection, the BCST-20 Scanner uses a 256KB memory as a data buffer, and sends the collected data to the host computer one by one via the 2.4Ghz. Upon reading a barcode successfully, the scanner responds with one short beep and its LED indicator becomes green and goes off quickly. However, the host computer may not receive the data immediately if getting out of range. With the 256KB transmit buffer, the scanner can ignore the transmission status and keep on reading barcodes until the buffer is full. When the buffer is full, the scanner will respond with a long beep (low tone), this reminds the user that the space of buffer is not enough and can not read barcode any more. Once the Buffer is

full, the user should return to the range of 2.4Ghz connection quickly, the data in the buffer can be sent back to the host computer and release the space of buffer.

**Note:** The 256KB transmit buffer on the scanner can hold as many as 2600 barcodes bases on Code128. You can choose to clear the data in the buffer every time when you turn on the scanner.



Enable Clear Data in Buffer When  
Turn On the Scanner



(\*) Disable Clear Data in Buffer When  
Turn On the Scanner

**Note:** You can clear the data in the buffer via enable barcode, you can also clear the data in the buffer via press the Power key long time.

After the 2.4Ghz connect successfully, the barcodes in the buffer will upload to appointed position automatically. You also can setup upload the barcodes in the buffer or not via reading the following barcodes. By default, it is enabled.

If you don't want to upload the barcodes automatically, you can setup as disabled, when the 2.4Ghz is connected, the barcodes won't upload. You can double click Power key to start uploading the barcodes.



(\*) Enable Auto Uploading



Disable Auto Uploading



Enter Setup



Exit with Save



Exit without Save

### 1.2.1 Inventory Mode

If you want to keep the barcodes in the buffer of BCST-20 for multiple uploading, you can choose inventory mode. In inventory mode, BCST-20 will count the number of the barcodes automatically, and control the time, position etc. for uploading. Also, you can clear the barcodes in the buffer after uploading. Following is the setup method:

1. Read 'Enter Inventory Mode' barcode to enter into the inventory mode



Enter Inventory Mode

2. If you want to recover to normal mode, read the 'Enter Normal Mode' barcode



Enter Normal Mode

3. Read the 'Clear the barcodes in the buffer' barcode to clear the barcodes (only suitable for inventory mode)



Clear the barcodes in the buffer

4. Read 'Data Uploading' barcode to upload the barcodes in the buffer (only suitable for inventory mode)



Data Uploading

5. Read 'Upload Counting' barcode to count the number of the barcodes (only suitable for inventory mode)



Upload Counting

**Note:** Inventory function can be used under any scan mode mentioned in 1.5.



### 1.3 LED Indicator

The LED indicators on BCST-20 can help the user know about the current operation status.

COLOR OF LED INDICATOR	MEANING
Green LED on and off quickly	Good Read, with one short beep (high tone)
Purple, Flashing (On/Off ratio 1:1)	Indicates the BCST-20 Scanner in Setting mode
Blue, Flashing (On/Off ratio 1:1)	Indicates the scanner is waiting for connection, the BCST-20 stores the address, which connects with the last time.
Blue, Flashing (On/Off ratio 20ms:3s)	Indicates the BCST-20 Scanner establish connection successfully, with two short beeps (low-high tone). Indicates the BCST-20 Scanner reconnect successfully, with two short beeps (low-high tone)
Red, Flashing (On/Off ratio 1:1)	Indicates the BCST-20 Scanner has no address of BT which connects with before.

### 1.4 Beeper

The beeper built in BCST-20 can help the user know about the current operation status.

BEEPING	MEANING
One long beep, high tone	Power on. If the scanner has no connection address which could connect with, flashing red. If the scanner has connection address which could connect with, flashing blue.
One short beep, high tone	Read barcode, with green LED on and off quickly
One long beep, low tone	Configuration error, with purple flashing; Or transmit buffer full, with green LED on and off quickly
Two short beeps, high tone	Power off.

Two short beeps, low-high tone	Wireless connection established, with blue LED flashing (On/Off ratio 20ms:3s).
Two short beeps, high-low tone	Wireless connection out of range or suspended, with blue LED flashing (On/Off ratio 1:1).
Three short beeps, tone descending from high to low	Enter or Exit Setting mode, with purple LED flashing.
Three short beeps, tone ascending from low to high	Configuration correct, with purple LED flashing;

### 1.4.1 Beeper Volume



Mute



Minimum Volume



(\*)Medium Volume



Maximum Volume

For example: Set Minimum Volume for beeper.

1. Read the "Enter Setup" barcode;
2. Read the "Minimum Volume" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

## 1.5 Scan Modes

Four kinds of scan modes are supported by the BCST-20 Barcode Scanner:

### 1.5.1 Manual Mode

By default, the scan mode is set to Manual Mode. If the user keeps press the Scan Key, the BCST-20 Scanner will emit a red light line. This indicates the scanner could scan, the scanning will not stop until the scanner under the following situation.

- \* Read a barcode successfully;
- \* Release the Scan Key.



Manual Mode



Enter Setup



Exit with Save



Exit without Save

### 1.5.2 Continuous Mode

When you active the “Continuous Mode”, you don’t need to trigger the “Scan Key”. After a successful decoding, the removal of barcode is required. It is not allowed to proceed to decode until the decoding delay time has passed. To decode the same barcode repeatedly, move away the barcode and put it back again and again for scanning.



Continuous Mode

Set the time interval between each decoding for Continuous Mode.



Setup Delay between Re-read



Enter Setup



Exit with Save



Exit without Save

## Delay Between Re-Read

The delay time between re-read of above scan modes could be set by the following barcodes.



400ms



800ms



1s



(\*)2s



3s



5s



10s



15s

For Example:

1. Read the "Enter Setup" barcode;
2. Read the "Auto Power off Mode" barcode;
3. Read the "1s" of the time interval between each scanning barcode;
4. Read the "Exit with Save" barcode.
5. Then enter the Auto Power Off Mode.



Enter Setup



Exit with Save



Exit without Save

### 1.5.3 Auto Power Off Mode



(\*)Auto Power Off Mode



Setup Auto Power Off Time



Enter Setup



Exit with Save



Exit without Save

### 1.5.4 Auto-induction Mode

Under the Auto-induction Mode, the users just need to move the barcodes to be scanned in front of the light band of BCST-20, no need to press the Scan Key, there will show a red light line. This indicates the scanner is ready to scan. The scanning will not stop until the scanner is under the following situation.

- \* Read a barcode successfully;
- \* The pre-set timeout expires (the default time is 2s).



induction Mode

You also can setup the best auto-induction distance according to actual demand, read the following barcode for setup.



Setup Auto -induction Distance

For Example:

1. Read the "Enter Setup" barcode;
2. Read the "Auto-induction Mode" barcode;
3. Read the "Setup Auto-induction Distance";
4. Read the numeric barcode in Appendix I; (0 means farthest, 9 means nearest)
5. Read the "Exit with Save" barcode.
6. Then enter the Auto-induction Mode.



Enter Setup



Exit with Save



Exit without Save

## 1.6 Symbolologies Supported

Most of the popular barcode symbolologies are supported by the BCST-20 Scanner, as listed below. Refer to Chapter 4 for details of each symbology.

Symbolologies Supported: Enable/Disable		Pre-Set
Codabar		Disable
Code 11		Disable
Code 93		Disable
MSI		Disable
Code 128		Enable
UCC/EAN-128		Enable
Code 39		Enable
EAN/UPC	EAN-8	Enable
	EAN-13	Enable
	UPC-A	Enable
	UPC-E	Enable
	ISBN	Disable
Code 2 of 5	Industrial 25	Disable
	Interleaved 25	Disable
	Standard 25	Disable
	2/5 Matrix	Disable

## 1.7 USB Wired Data Transmission

BCST-20 Barcode Scanner supports USB Data live transmission. The users just need to connect one end of the USB cable to a device with USB port, and the other end to BCST-20, open a textbox, it will enter data transmission. USB wired transmission is the prior transmission mode.



## 1.8 Digit capacity Setting



Fixed digit capacity



Zero fill

For example, the interception of barcodes in a fixed length.

1. Scan the "Enter Setup" barcode.
2. Scan the "fixed digit capacity" barcode.
3. Scan the "zero fill" barcode. (Note: This step is needed only when you want to add zeros in front of the original barcodes.)
4. Scan the numeric barcode in Appendix I. (Reading 1 then 5, means 15 digits.)
5. Scan the "Exit with Save" barcode.

P.S. To restore the original barcodes, scan "Enter Setup" - "fixed digit capacity" - "Exit with Save" .



Enter Setup



Exit with Save



Exit without Save

## Chapter 2 How to Connect with USB receiver.

- 1、 Make BCST-20 full charged, press Power key. If the scanner never connected with the computer before, it will respond with a beep, and flashing red.
- 2、 Have the scanner read the "Enter Setup" barcode to enter the setting mode.
- 3、 Have the scanner read the associated barcode to activate the 2.4G connection interface.
- 4、 Have the scanner read the barcodes for related settings.
- 5、 Have the scanner read the barcode to exit the setting mode.

Connection setting

1. Read "Enter Setup"
2. Read "2.4G"



Enter Setup



2.4G

## Chapter 3 Symbology Settings

In this chapter, a brief on the symbology setting is provided for your reference

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### 3.1 Codabar

Decide whether or not to enable Codabar. The BCST-20 Scanner defaults disable Codabar contents.



Enable Codabar



(\*) Disable Codabar

Note: Read the "Disable Codabar" barcode will make the scanner not able to read the Codabar barcode. Thus, if the scanner cannot read the Codabar barcode, please try to read "Enable Codabar" to reset.

For example: Enable Codabar.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Codabar" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.1.1 Start/Stop Transmission

Decide whether or not to include the Start/Stop characters in the data being transmitted.



(\*) Transmit Codabar Start/Stop Characters



Do Not Transmit Codabar Start/Stop Characters

For example: Do Not Transmit Codabar Start/Stop Characters.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Codabar" barcode; (If Codebar is disabled, it is need to set);
3. Read the "Do Not Transmit Codabar Start/Stop Characters" barcode;
4. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.2 Code 25 : Industrial 25

Decide whether or not to enable Industrial 25. The BCST-20 Scanner defaults disable Industrial 25.



Enable Industrial 25



(\*) Disable Industrial 25

Note: Read the "Disable Industrial 25" barcode will make the scanner not able to read the Industrial 25 barcode. Thus, if the scanner cannot read the Industrial 25 barcode, please try to read "Enable Industrial 25" to reset.

For example: Enable Industrial 25.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Industrial 25" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.3 Code 25 : Interleaved 25

Decide whether or not to enable Interleaved 25. The BCST-20 Scanner defaults disable.



Enable Interleaved 25



(\*) Disable Interleaved 25

Note: Read the "Disable Interleaved 25" barcode will make the scanner not able to read the Interleaved 25 barcode. Thus, if the scanner cannot read the Interleaved 25 barcode, please try to read "Enable Interleaved 25" to reset.

For example: Enable Interleaved 25.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Interleaved 25" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.4 Code 25 : Matrix 25

Decide whether or not to enable Matrix 25. The BCST-20 Scanner defaults disable Matrix 25.



Enable Matrix 25



(\*) Disable Matrix 25

Note: Read the "Disable Matrix 25" barcode will make the scanner not able to read the Matrix 25 barcode. Thus, if the scanner cannot read the Matrix 25 barcode, please try to read "Enable Matrix 25" to reset.

For example: Enable Matrix 25.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Matrix 25" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save



### 3.5 Code 25 : Standard 25

Decide whether or not to enable Standard 25. The BCST-20 Scanner defaults disableStandard 25.



Enable Standard 25



(\*) Disable Standard 25

Note: Read the "Disable Standard 25" barcode will make the scanner not able to read the Standard 25 barcode. Thus, if the scanner cannot read the Standard 25 barcode, please try to read "Enable Standard 25" to reset.

For Example: Enable Standard 25.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Standard 25" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.6 Code 39

Decide whether or not to enable Code 39, the BCST-20 Scanner defaults disable Code 39.



(\*) Enable Code 39



Disable Code 39

Note: Read the "Disable Code 39" barcode will make the scanner not able to read the Code 39 barcode. Thus, if the scanner cannot read the Code 39 barcode, please try to read "Enable Code 39" to reset.

For example: Disable Codabar.

1. Read the "Enter Setup" barcode;
2. Read the "Disable Code 39" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.6.1 Start/Stop Transmission

Decide whether or not to include the Start/Stop characters in the data being transmitted.



(\*) Transmit Code 39 Start/Stop Characters



Do Not Transmit Code 39 Start/Stop Characters

For example: Do Not Transmit Code 39 Start/Stop Characters.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Code 39" barcode; (If Code 39 is disabled, it is need to set);
3. Read the "Do Not Transmit Code 39 Start/Stop Characters" barcode;
4. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.6.2 Checksum Verification

It is not enforced to include the checksum character in the Code 39 data. If checksum character is included, it should be the last character of the barcode data. Checksum character is a calculate value bases on all of the data, and is used to check if the data is correct or not.

Thus, if the scanner is set to "Do Not Verify" and the scanner will output all the barcode data.

If the scanner is set to "Verify without Output Checksum Character", and the scanner will check the data based on the last character of the barcode data. If the check passes, the scanner will output the data without the checksum character; if the check doesn't pass, the scanner will display read failure.

If the scanner is set to "Verify with Output Checksum Character", and the scanner will check the data based on the last character of the barcode data. If the check passes, the scanner will output the data with the checksum character; if the check doesn't pass, the scanner will display read failure.



(\*) Do Not Verify



Verify without Output Checksum Character



Verify with Output Checksum Character

### 3.6.3 Standard/Full ASCII Code 39

Decide whether or not to support Code 39 Full ASCII that includes all the alphanumeric and special character. The BCST-20 Scanner defaults full ASCII Code 39. It could disable full ASCII Code 39 via set.



(\*) Enable Code 39 Full ASCII



Disable Code 39 Full ASCII



Enter Setup



Exit with Save



Exit without Save

### 3.7 Code 93

Decide whether or not to enable Code 93. The BCST-20 Scanner defaults disable Code 93.



Enable Code 93



(\*) Disable Code 93

Note: Read the "Disable Code 93" barcode will make the scanner not able to read the Code 93 barcode. Thus, if the scanner cannot read the Code 93 barcode, please try to read "Enable Code 93" to reset.

For Example: Enable Code 93.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Code 93" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.8 Code 128

Decide whether or not to enable Code 128. The BCST-20 Scanner defaults enable Code 128.



(\*) Enable Code 128



Disable Code 128

Note: Read the "Disable Code 128" barcode will make the scanner not able to read the Code 128 barcode. Thus, if the scanner cannot read the Code 128 barcode, please try to read "Enable Code 128" to reset.

For Example: Disable Code 128

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Disable Code 128" barcode;
- 3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.9 EAN-8

Decide whether or not to enable EAN-8. The BCST-20 Scanner defaults enable EAN-8.



(\*) Enable EAN-8



Disable EAN-8

#### 3.9.1 Convert to EAN-13

There are two ways for EAN-8 to change, convert to EAN-13, or add "0" ahead of EAN-8, and the EAN-8 ID doesn't change.

Decide whether or not to convert to EAN-13, if EAN-8 converts to EAN-13, it will be read as same as EAN-13. If add a "0" ahead of EAN-8, and the EAN-8 ID doesn't change, the output ID is still EAN-8 ID.



Convert to EAN-13



Add "0" ahead and ID is not change



(\*) Do not Convert



Enter Setup



Exit with Save



Exit without Save



### 3.9.2 Checksum Transmission

Decide whether or not to transmit Checksum.



(\*) Transmit EAN-8 Checksum



Do Not Transmit EAN-8 Checksum

For example: Do Not Transmit EAN-8 Checksum.

1. Read the "Enter Setup" barcode;
2. Read the "Enable EAN-8" barcode; (If EAN-8 is disabled, it is need to set);
3. Read the "Do Not Transmit EAN-8 Checksum" barcode;
4. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.10 EAN-13

Decide whether or not to read EAN-13. The BCST-20 Scanner defaults enable EAN-13.



(\*) Enable EAN-13



Disable EAN-13

#### 3.10.1 Convert to ISBN

Decide whether or not to convert the EAN-13 to ISBN.



Convert EAN-13 to ISBN



(\*) Do Not Convert EAN-13 to ISBN



Enter Setup



Exit with Save



Exit without Save

### 3.10.2 Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



(\*) Transmit EAN-13 Checksum



Do Not Transmit EAN-13 Checksum

For example: Convert EAN-13 to ISBN.

1. Read the "Enter Setup" barcode;
2. Read the "Convert EAN-13 to ISBN" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.11 UPC-A

Decide whether or not to add "0" in the output of UPC-A data.



UPC-A Output "0"



(\*) UPC-A Do Not Output "0"

#### 3.11.1 Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



(\*) Transmit UPC-A Checksum



Do Not Transmit UPC-A Checksum

For example: UPC-A Output "0", Do Not Transmit UPC-A Checksum.

1. Read the "Enter Setup" barcode;
2. Read the "UPC-A Output "0"" barcode;
3. Read the "Do Not Transmit UPC-A Checksum" barcode;
4. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.12 UPC-E

Decide whether or not to enable UPC-E. The BCST-20 Scanner defaults enable UPC-E.



(\*) Enable UPC-E



Disable UPC-E

#### 3.12.1 Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



(\*) Transmit UPC-E Checksum



Do Not Transmit UPC-E Checksum

For example: Do Not Transmit UPC-E Checksum

1. Read the "Enter Setup" barcode;
2. Read the "Enable UPC-E" barcode;
3. Read the "Do Not Transmit UPC-E Checksum" barcode;
4. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.13 MSI

Decide whether or not to enable MSI. The BCST-20 Scanner defaults disable MSI.



Enable MSI



(\*) Disable MSI

Note: Read the "Disable MSI" barcode will make the scanner not able to read the MSI barcode. Thus, if the scanner cannot read the MSI barcode, please try to read "Enable MSI" to reset.

For example: Enable MSI.

1. Read the "Enter Setup" barcode;
2. Read the "Enable MSI" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

### 3.14 Code 11

Decide whether or not to enable Code 11. The BCST-20 Scanner defaults disable Code 11.



Enable Code11



(\*) Disable Code11

Note: Read the "Disable Code 11" barcode will make the scanner not able to read the Code 11 barcode. Thus, if the scanner cannot read the Code 11 barcode, please try to read "Enable Code 11" to reset.

For example: Enable Code 11.

1. Read the "Enter Setup" barcode;
2. Read the "Enable Code 11" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

## Chapter 4 Defining Output Format

Before data transmission to the host or device, you can pre-process the data and decide the format of the data transfer.

### 4.1 Code ID

CODE TYPE	CODE ID	HEX VALUE
Codabar	a	61
Code 39	b	62
UPC-E	c	63
EAN-13	d	64
Interleaved 2 of 5 (ITF)	e	65
Code 2 of 5 (Standard)	f	66
MSI	g	67
Code 11	h	68
Code 93	i	69
Code 128	j	6A
Matrix 2 of 5	m	6D
2/5 Industrial	n	6E
EAN-8	o	6F
ISBN	k	6B
UPC-A	l	6C

Decide whether or not to add Code ID in the barcode data of output.



Apply Output ID



(\*) Ignore Output ID



For example: Apply Output ID

1. Read the "Enter Setup" barcode;
2. Read the "Output ID" barcode;
3. Read the "Exit with Save" barcode;

## 4.2 Suffix Code of Barcode Settings

Decide whether or not to apply Enter for suffix of barcode data.



(\*) Apply Enter for suffix



Do not Apply Enter for suffix

Decide whether or not to apply Alt to suffix of barcode data.



(\*) Apply Alt for suffix



Do not Apply Alt for suffix

For example: Do not Apply Enter for suffix.

1. Read the "Enter Setup" barcode;
2. Read the "Do not Apply Enter for suffix" barcode;
3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

# Appendix I

The setting barcodes of parameters' value.



0



1



2



3



4



5



6



7



8



9

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