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.
* 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.
* Supports a wide range of barcode types. FedEx and USPS barcodes are all supported.
* Anti-crash and anti-shock design.
* Ergonomic design. Up to 3 million keystroke life expectancy.
* Unrivalled battery life.
* Press to scan - powered by deep sleep mode.
* USB mode: 64 bit barcodes. 2.4G wireless mode: 57 bit barcodes.
* Prefix and suffix are allowed to be added. Reset to factory default settings by scanning the “Factory Reset” barcode.

Appearance
**Introduction of Key Function**

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

**Specifications**

**PHYSICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Material</th>
<th>ABS+TPU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Length 160mm<em>Width 70mm</em> Height 90mm</td>
</tr>
<tr>
<td>Color</td>
<td>White, Black</td>
</tr>
<tr>
<td>Power supply</td>
<td>Built-in rechargeable lithium battery</td>
</tr>
<tr>
<td>Weight</td>
<td>150g(With battery)</td>
</tr>
</tbody>
</table>

**PERFORMANCE CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Sensor</th>
<th>2500 pixels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Source(Laser)</td>
<td>Laser LED 650+/-20nm</td>
</tr>
<tr>
<td>Resolution</td>
<td>5mil</td>
</tr>
<tr>
<td>Nominal Working Distance</td>
<td>6~30cm</td>
</tr>
<tr>
<td>Decode Rate</td>
<td>200 decodes per second</td>
</tr>
<tr>
<td>Scan width</td>
<td>30mm=Scanner Window</td>
</tr>
<tr>
<td>Decode mode</td>
<td>Single-Line Aiming</td>
</tr>
<tr>
<td>Scan mode</td>
<td>Auto off mode/Manual mode</td>
</tr>
<tr>
<td>Print Contrast Minimum</td>
<td>30%</td>
</tr>
<tr>
<td>Scan angles</td>
<td>Roll30¡ Pitch75¡ Yaw65¡</td>
</tr>
<tr>
<td>Cylinder Horizontal Scan</td>
<td>Diameter 35mm</td>
</tr>
<tr>
<td>Indication</td>
<td>Beeper, LED</td>
</tr>
<tr>
<td>Radio Range</td>
<td>10m Visual range</td>
</tr>
<tr>
<td>Interfaces Supported</td>
<td>USB</td>
</tr>
</tbody>
</table>

**POWER**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>DC 5V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Safety</td>
<td>Accord with national level two laser safety standards</td>
</tr>
<tr>
<td>EMC</td>
<td>CE &amp; FCC DOC Compliance</td>
</tr>
<tr>
<td>standby Current</td>
<td>35mA</td>
</tr>
<tr>
<td>Operating current</td>
<td>60mA</td>
</tr>
</tbody>
</table>
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.
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 green.
Step 3: Read a Setup barcode. The BCST-20 Barcode Scanner will respond with three beeps (tone ascending from low to high), and its LED indicator will flash green.

For Example:

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

Steps of Setup

1. Enter Setup
2. Details (e.g., Enable/Disable a Barcode)
3. Exit 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 green and go off quickly after reading the barcode.

![Barcode for Enter Setup](image)

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.

![Barcode for Exit with Save](image)

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.

![Barcode for Exit without Save](image)
**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.

![Barcode Image]

**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:

![Barcode Image]

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

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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1.8 Digit capacity Setting...................................................................23
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.

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.
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.

### 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 blue 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.

**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.
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

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

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

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

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

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.

<table>
<thead>
<tr>
<th>COLOR OF LED INDICATOR</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue LED on and off quickly</td>
<td>Good Read, with one short beep (high tone)</td>
</tr>
<tr>
<td>Green, Flashing (On/Off ratio 1:1)</td>
<td>Indicates the BCST-20 Scanner in Setting mode</td>
</tr>
<tr>
<td>Blue, Flashing (On/Off ratio 1:1)</td>
<td>Indicates the scanner is waiting for connection, the BCST-20 stores the address, which connects with the last time.</td>
</tr>
<tr>
<td>Blue, Flashing (On/Off ratio 20ms:3s)</td>
<td>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)</td>
</tr>
<tr>
<td>Red, Flashing (On/Off ratio 1:1)</td>
<td>Indicates the BCST-20 Scanner has no address of BT which connects with before.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>BEEPING</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>One short beep, high tone</td>
<td>Read barcode, with blue LED on and off quickly</td>
</tr>
<tr>
<td>One long beep, low tone</td>
<td>Configuration error, with purple flashing; Or transmit buffer full, with green LED on and off quickly</td>
</tr>
<tr>
<td>Two short beeps, high tone</td>
<td>Power off.</td>
</tr>
<tr>
<td>Two short beeps, low-high tone</td>
<td>Wireless connection established, with blue LED flashing (On/Off ratio 20ms:3s).</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Two short beeps, high-low tone</td>
<td>Wireless connection out of range or suspended, with blue LED flashing (On/Off ratio 1:1).</td>
</tr>
<tr>
<td>Three short beeps, tone descending from high to low</td>
<td>Enter or Exit Setting mode, with green LED flashing.</td>
</tr>
<tr>
<td>Three short beeps, tone ascending from low to high</td>
<td>Configuration correct, with green LED flashing;</td>
</tr>
</tbody>
</table>

### 1.4.1 Beeper Volume

![Barcode: Mute](#)

![Barcode: Minimum Volume](#)

![Barcode: Medium Volume](#)

![Barcode: 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.

![Barcode: Enter Setup](#)

![Barcode: Exit with Save](#)

![Barcode: Exit without Save](#)
1.5 Scan Modes
Three 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.
1.5.2 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]
1.5.3 Auto Power Off Mode

Enter Setup

Exit with Save

Exit without Save

(*)Auto Power Off Mode

Setup Auto Power Off Time
1.6 Symbologies Supported
Most of the popular barcode symbologies are supported by the BCST-20 Scanner, as listed below. Refer to Chapter 4 for details of each symbology.

<table>
<thead>
<tr>
<th>Symbologies Supported: Enable/Disable</th>
<th>Pre-Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codabar</td>
<td>Enable</td>
</tr>
<tr>
<td>Code 93</td>
<td>Enable</td>
</tr>
<tr>
<td>MSI</td>
<td>Disable</td>
</tr>
<tr>
<td>USPS</td>
<td>Enable</td>
</tr>
<tr>
<td>FedEx</td>
<td>Enable</td>
</tr>
<tr>
<td>Code 128</td>
<td>Enable</td>
</tr>
<tr>
<td>UCC/EAN-128</td>
<td>Enable</td>
</tr>
<tr>
<td>Code 39</td>
<td>Enable</td>
</tr>
<tr>
<td>EAN/UPC</td>
<td></td>
</tr>
<tr>
<td>EAN-8</td>
<td>Enable</td>
</tr>
<tr>
<td>EAN-13</td>
<td>Enable</td>
</tr>
<tr>
<td>UPC-A</td>
<td>Enable</td>
</tr>
<tr>
<td>UPC-E</td>
<td>Enable</td>
</tr>
<tr>
<td>ISBN</td>
<td>Disable</td>
</tr>
<tr>
<td>Code 2 of 5</td>
<td></td>
</tr>
<tr>
<td>Industrial 25</td>
<td>Disable</td>
</tr>
<tr>
<td>Interleaved 25</td>
<td>Enable</td>
</tr>
<tr>
<td>Standard 25</td>
<td>Enable</td>
</tr>
<tr>
<td>2/5 Matrix</td>
<td>Disable</td>
</tr>
</tbody>
</table>

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

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”

---

![Barcode Image](image-url)
Chapter 3 Symbology Settings

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

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3.12 UPC-E............................................................................................................43
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3.13 MSI................................................................................................................44
3.1 Codabar
Decide whether or not to enable Codabar. The BCST-20 Scanner defaults disable Codabar contents.

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

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.
3.2 Code 25 : Industrial 25
Decide whether or not to enable Industrial 25. The BCST-20 Scanner defaults 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.
3.3 Code 25: Interleaved 25

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

![Barcode](image1)

Enable Interleaved 25

![Barcode](image2)

(*) 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.

![Barcode](image3)

Enter Setup

![Barcode](image4)

Exit with Save

![Barcode](image5)

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.

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.
3.5 Code 25 : Standard 25
Decide whether or not to enable Standard 25. The BCST-20 Scanner defaults disableStandard 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.
3.6 Code 39
Decide whether or not to enable Code 39, the BCST-20 Scanner defaults 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.
3.6.1 Start/Stop Transmission

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

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.
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.

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.
3.8 Code 128
Decide whether or not to enable Code 128. The BCST-20 Scanner defaults enable 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.
3.9 EAN-8
Decide whether or not to enable EAN-8. The BCST-20 Scanner defaults enable 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.
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.
3.10 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.

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

![Enable MSI Barcode]

![(*) Disable MSI Barcode]

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.
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

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<th>CODE TYPE</th>
<th>CODE ID</th>
<th>HEX VALUE</th>
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</thead>
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<td>65</td>
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<td>Code 2 of 5 (Standard)</td>
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</table>

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.
Appendix I

The setting barcodes of parameters' value.
Prefix and Suffix Setting

1. Scan the “Enter Setup” barcode

![Enter setup barcode]

2. Scan the “Prefix Setting” or “Suffix Setting” scanner

![Prefix Setting barcode]

![Suffix Setting barcode]

3. Scan certain barcodes sequentially to generate your own prefix/suffix. Example: If you want to add “#” as prefix or suffix, according to the barcode list provided on our website, you need to scan the “3” barcode first and then scan the “5” barcode. (Please refer to www.inateck.com for the number and symbol barcode list.)

![Barcode 0]

![Barcode 1]

![Barcode 2]

![Barcode 3]
4. Scan the “Exit with Save” barcode.
### Prefix/Suffix number and symbol list

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<th>Number</th>
<th>Symbol</th>
<th>Number</th>
<th>Symbol</th>
<th>Number</th>
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