# MK-600W3 User Manual

## 2D Bluetooth Barcode Scanner

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# 1. Important Notice

In compliance with a number of International standards as well as reguations, MK-600W3 is a highly qualified product at the technical and safety level. In this chapter enumerates the list of regulations which MK-600W3 complies with for your reference.

# Important Notices 1

## 1-1. FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

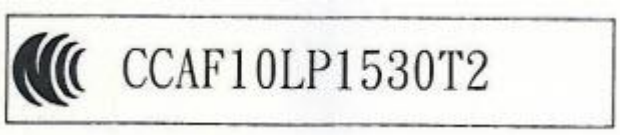
## 1-2. Conformity with Technical Regulations for specified radio equipment in Japan

**Certificate Number: 204WW81000100**


## 1-3. National Communication Commission

**NCC Registration Number: NCC-RCB-05**

**Qualified serials number on device:**




## 1-4. RoHS Compliance

The RoHS directive mandates that producers of electrical or electronic equipment sold into Europe must minimize or eliminate the following materials from their design, as they are considered health risks:

1. Lead
2. Mercury
3. Cadmium
4. Hexavalent Chromium
5. Polybrominated biphenyls (PBB)
6. Polybrominated biphenyl ethers (PBDE)

Committed to the environment, CanMax Technology makes the necessary changes to our products in order to comply with RoHS directive. This involves the process of converting the non-compliant components (for instance, electronics, Pc Boards, etc.) of our products into the compliant ones. We also improve the assembly processes to ensure the full compliance with RoHS directive. The measures that we take in conformity with RoHS directive would never cause any change in the product appearance, nor do they decrease functionality of the product. Most importantly, our product still provides reliable and excellent product performance as we promise.

## 1-5. Safety Precaution

- Do not stare directly at light beams.
- Do not directly touch the scanner window for reading performance might decrease if the window is dirty or scratched.
- Do not disassemble or modify the internal components from the scanner.
- Do not expose the scanner to any flammable source.
- Do not overcharge the battery.

**Lithium-Ion polymer Battery**

- The Lithium-ion polymer battery energy density is less than 400 Wh/L. Therefore, PSE certification does not require in this product.

- The first, initial charge will take up four hours to fully charge your battery.
- Battery Life time
  Memory Mode: Approximately 18000 scans (5 sec/per scan)
  Bluetooth Mode: Approximately 15000 scans (5 sec/per scan)
- Do not assemble or disassemble the battery without technical support.
- Do not use unspecified power adaptor to charge the battery.
- During the charging process, if red color LED indicator keeps flashing rapidly, terminate the charging, and return the scanner to authorized dealers.
- Once battery leakage or abnormal odor occurs, terminate the current operation, and return the scanner to authorized dealers.
- Once batteries leak, avoid contact with skins or eyes. To clean up the battery leakage, rinse the affected parts with fresh water, and consult the doctor immediately.

# 2.Introduction

Using this introductory chapter you will grasp physical aspects of MK-600W3 with regard to the product appearance and specification. On top of it, the sections for Manual/Page layout will enable you to locate the topics of your interest through the manal more efficiently.

## 2-1. Product Features

MK-600W3 is a select barcode scanner of versatility in aim to provide scanning accuracy and enhance working efficiency. Not only does its vast storage capacity of 4M Byte flash memory suffice you to store up as much barcodes as you need, but also you are able to well handle all sorts of tasks with three-in-one multi-functionality provided. Besides, through the lightweight and stylish design of MK-600W3, a grip of it will have you experience a comfortable touch which eases physical tension due to a laborious task. Overall, from a great diversity of scanning preferences to high compatibility with different Bluetooth devices and a broad support of multiple symbology, the ergonomic scanner will definitely leave you extraordinary impressions in your scanning activities.

## 2-2. Product Specification

| **Model NO.** | **MK-600W3** |
|---|---|
| **Under cable mode interface** | USB COM,USB HID |
| **Supported barcode** | 1D: EAN/UPC, RSS, Code 39, Code 128, UCC/EAN 128, ISBN, ISBT, Interleaved, Matrix, Industrial and Standard 2 of 5, Codabar, Code 93/93i, Code 11, MSI, Plessey, Telepen, Postal Codes |
| | 2D: Data Matrix, PDF417, Micro PDF 417, Maxicode, QR, Aztec, EAN, UCC composite |
| **Optical Resolution** | 752(H)x480(V) pixels, 256 gray levels |
| **PCS** | D25% |
| **Scan Rate** | 2D: 60 images/sec.<br>1D: 200 scans/sec. |
| **Scan Angle** | 39℃(Horizontal) 25.5℃(Vertical) |
| **Depth of Field** | Minimum distance: 8cm/3.1» Maximum distance: 23.5cm/9.3 " (Code 39, PSC 0.9,0.125mm/5mil) |
| **LED indicator** | 3 color LED: red, green, blue |
| **Configuration** | User manual or Windows Utility |
| **Weight** | 80g |
| **Size** | 135.3(L)x 41(W) x 29.9(H)mm |
| **Environment Humidity** | 5% - 95%RH |
| **Working Temperature** | -20℃～50℃ (-4℉～122℉) |
| **Drop Durability** | 1m drop onto concrete surface |
| **Safety Standard** | FCC ClassA & CE |
| **Battery** | Rechargeable Li-Polymer battery (3.7V,1100mAH) and |

| Model NO. | MK-600W3 |
|---|---|
| | charge via USB port |
| **Ambient light** | Works in any lighting conditions from 0 to 100000 lux |
| **Power consumption** | 365～382mA (operation), 60～120A (standby) |

## 2-3. Package Information

The contents of the package may vary depending on your order. While some primary devices avail the users of their fundamental functionality, some optional items are also available for your purchase to maximize efficiency of our product.

Inside the package contain the following items:

- MK-600W3 Barcode Scanner
- Jelly Case
- Barcode Scanner Hand Strap
- USB Cable
- Solution CD
- USB Power Supply (Optional)

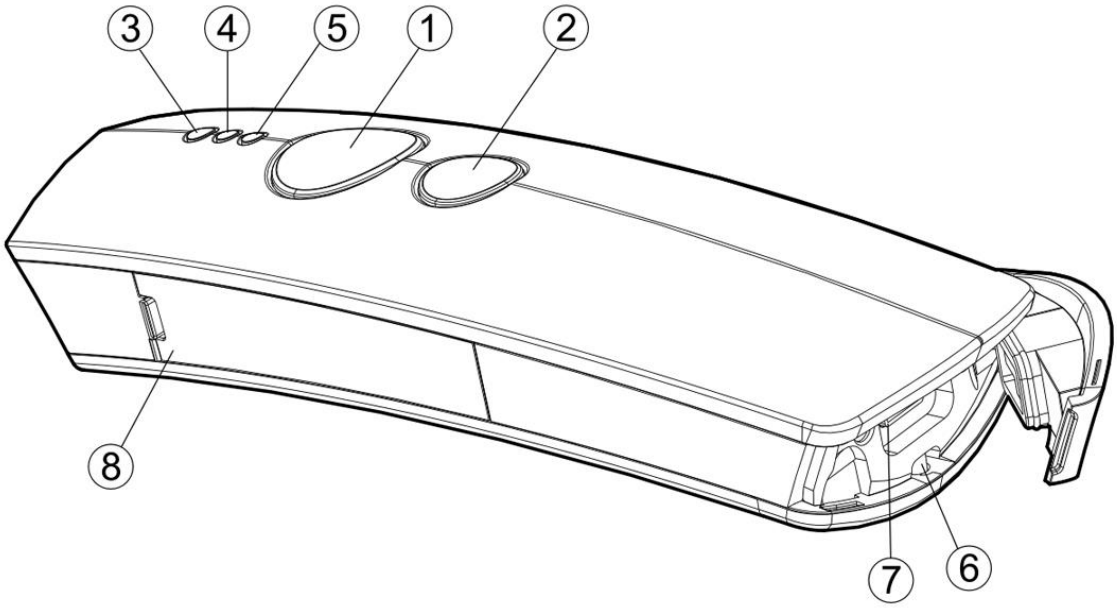
Browse Solution CD to locate the following how-to references for troubleshooting problems in using MK-600W3:

- Quick Start
- User Manual
- ISP Driver for Windows OS
- Utility Program

## 2-4. Supported Symbology

| Symbology | Enabled/Disabled |
|---|---|
| AuPost | Disabled |
| Aztec | Disabled |
| CaPost | Disabled |
| CodaBar | Enabled |
| CodaBlock | Disabled |
| Code11 | Disabled |
| Code128 | Enabled |
| Code39 | Enabled |
| Code93 | Disabled |
| Data Matrix | Disabled |
| GS1 Composite | Disabled |
| GS1 DataBar | Disabled |
| Industrial 25 | Disabled |
| Info Mail | Disabled |
| Intelligent Mail | Disabled |
| Interleave25 | Disabled |
| JP Post | Disabled |
| Matrix 25 | Disabled |
| MaxiCode | Disabled |
| MSI | Disabled |
| NI Post | Disabled |
| PDF417 | Enabled |
| PLANET | Disabled |
| Plessey | Disabled |
| POSTNET | Disabled |
| QR Code | Enabled |
| SePost | Disabled |
| Telepen | Disabled |
| TLC39 | Disabled |
| UKPost | Disabled |
| World Product Code | Enabled |

## 2-5. Product Overview




① Press down **Scan Button** to decode or store the barcode.

② Press down **Small Trigger** to perform versatile supplementary functions. For instance, pressing the key will lead to erasing barcode data which have been previously decoded in Memory Mode; it also works to pair the scanner with the Bluetooth devices in Bluetooth Mode.

③ **Good Read Indicator** indicates whether the barcode is successfully decoded. Green LED shows a successful decoding attempt.

④ **Mode Indicator** indicates the current operation mode. Blue LED stands for Bluetooth mode, green LED for Cable mode, and orange LED for Memory mode.

⑤ **Power Indicator** indicates the charge status. When the battery is running low, red LED light will be on to show a poor charge level. Once the charging process is completed, red LED will flash slowly to show a full battery charge.

⑥ **Strap Hole**

⑦ Secure the interface cable into **USB Host** in an attempt to transmit data or to charge the battery.

⑧ Replace the battery in the **Battery Compartment**.

## 2-6. Manual Layout

**Chapter 1 Important Notices** enumerates the list of rules and regulations which CM2D-600 conforms to as a qualified product.

**Chapter 2 Introduction** provides Product Specification, Product Information, Product Overview, and Manual /Page Layout.

**Chapter 3 Knowing your Scanner** introduces Configuration Flowchart, LED/Beeper Indication, and some basic operations with trigger buttons.

**Chapter 4 Quick Start** provides quick references to have you familiar with MK-600W3 within a short time frame.

**Chapter 5 Establish a Bluetooth Connection** provides instructions on how to pair MK-600W3 with different sorts of Bluetooth devices.

**Chapter 6 Editing General Setting** provides related setup barcodes for configuring general settings.

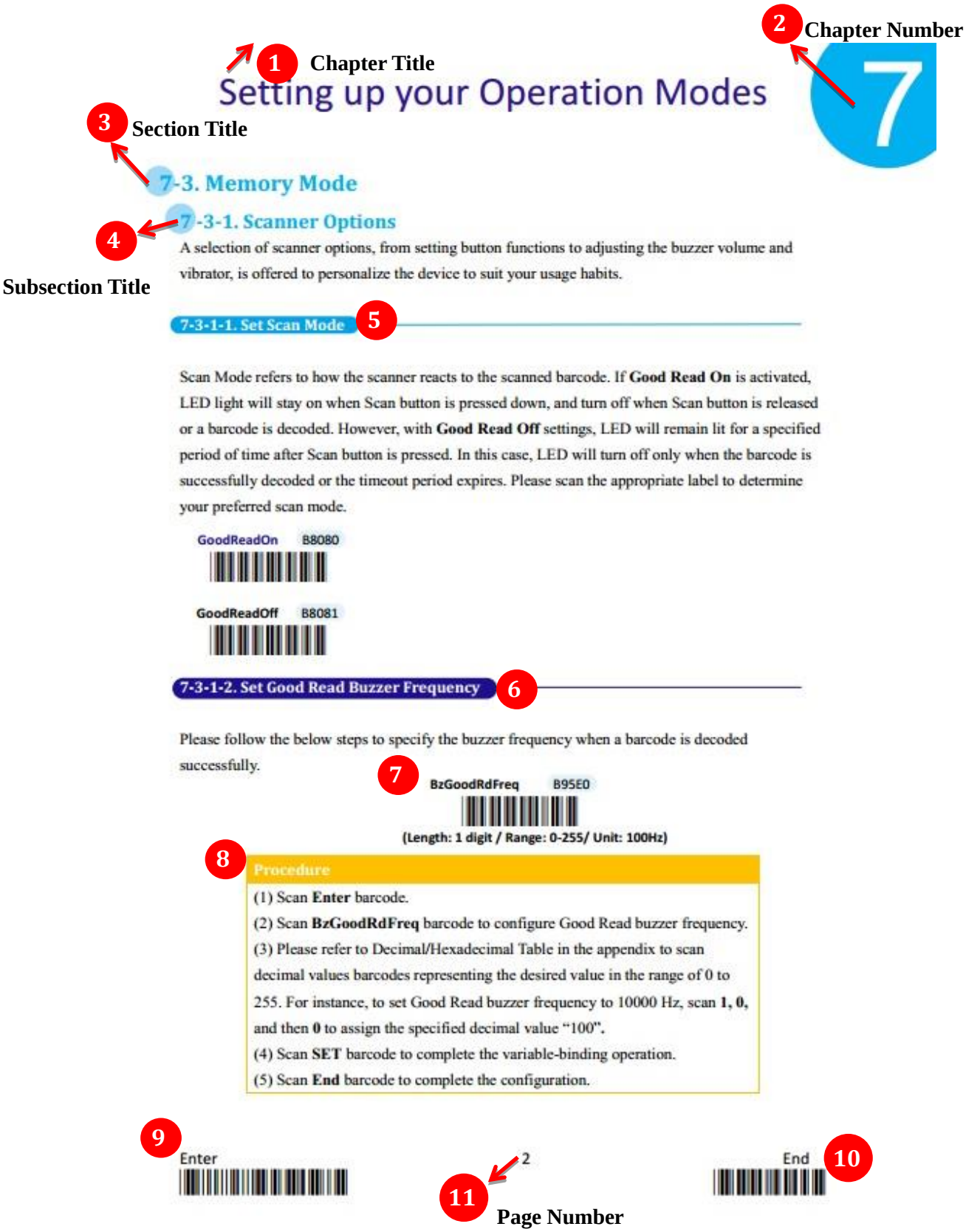
**Chapter 7 Setting up your Operation Modes** provides related setup barcodes for configuring three operation modes.

**Chapter 8 Configuring Symbology** provides related setup barcodes for symbology configurations.

**Appendix A** provides Decimal/Hexadecimal Table and ASCII Code Table for setting up special setup barcodes.

**Appendix B** provides sample barcodes which you can use for testing.

## 2-7. Page Layout



5

**Function Title** framed with the oval shape in deep sky blue generally gives the brief description regarding the relevant functions. However, it might also work to define regular setup barcodes which are scattered from Chapter 6 to Chapter 8. Configuring this type of barcode normally requires simply one-time scan to either turn on/off its functionality or to specify a predefined value, which is rather straightforward.

6

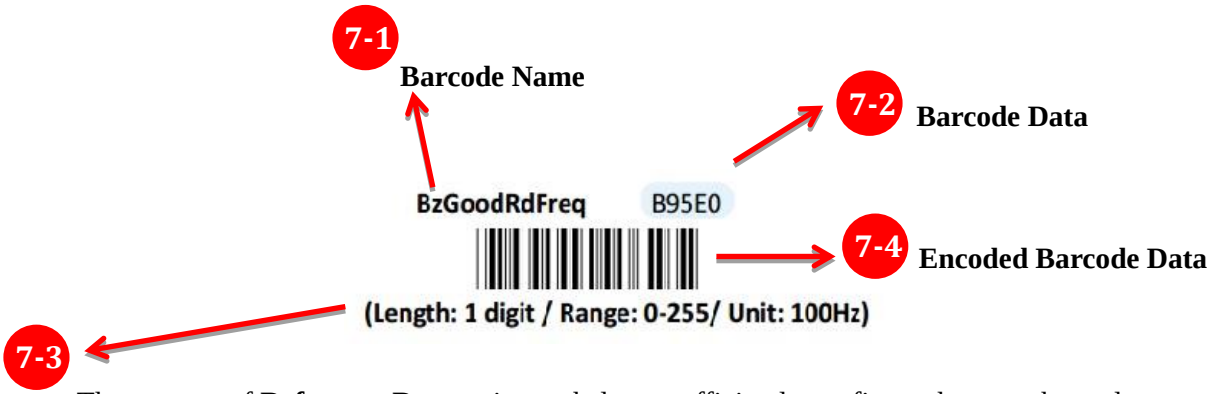
**Function Title** framed with the oval shape in dark blue is to define special setup barcodes. Configuring special setup barcodes usually demands more than one scan to complete relevant configuration.

7

Based on Code-39, the list of setup barcodes throughout the manual will be structured as shown in below figures:

**For regular setup barcodes**


**For special setup barcodes**




The concept of **Reference Range** aims to help you efficiently configure the setup barcode with the suggested value in the range. In the example, you are advised that the value is supposed to be one digit in length, to fall on the range from 0 to 255and will be measured in

8

In following **Configuration Steps**, you will get the clear idea of how to set up these special barcodes.

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**Enter label,** arranged in the bottom of every page, is one of the frequently-used barcodes when it comes to conducting your barcode-scanning activities. To ensure a valid configuration, please be advised that you always read **ENTER** barcode first before proceeding with other setup barcodes.

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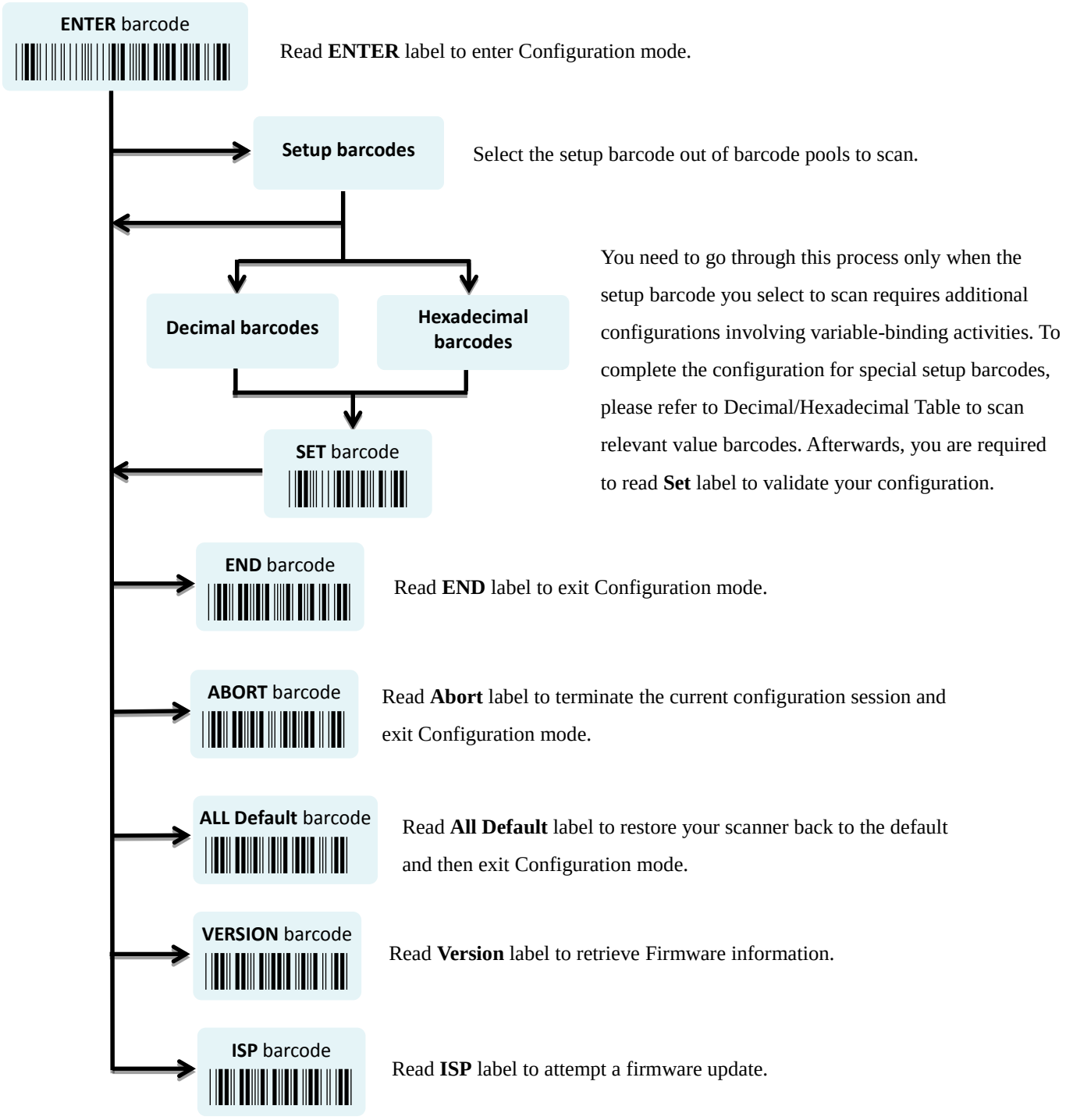
Like Enter label, **End barcode** is labeled as another frequently-used barcode. It is mandatory to scan End barcode at the end to validate your configuration. You can easily locate it at the bottom of every page.

# 3. Knowing your Scanner

Through this informational chapter you will be exposed to a variety of helpful knowledge regarding MK-600W3, from LED/beeper indications to the functionality of button triggers, before you start with the scanner. Not only will it assist you in correctly and efficiently using MK-600W3 but also help to use your time and efforts more wisely. It is encouraged to go back to this chapter for a quick reference whenever you encounter difficulties in operating the machine.

## 3-1. Configuration Flowchart

The below figure illustrates the sequences of scan events leading up to a positive scan result. The improper operation will not only waste your efforts but also likely produce the disappointing result which might be mistakenly viewed as a product defect. Please be advised to refer to the flowchart whenever you attempt a scan.



## 3-2. LED & Beeper indications

LED and Beeper signals both serve to deliver visual or acoustic messages regarding the status of the ongoing operation. Either color changes or sound pitches and melodies will suffice to indicate a scan result as advance notification. Please refer to the below chart to use LED and Beeper indications for your benefit while working on the device.

| Functions | Beeper Sequence | LED indication |
|---|---|---|
| Power on the scanner | | |
| Successfully decode a barcode | | Green LED flashes once |
| Successfully scan a regular setup barcode | high-low tone | |
| Successfully scan a special setup barcode | High-low-high-low notes | |
| Successfully enter configuration mode | A set of five ascending notes | Red, green, and then blue LEDs keep flashing slowly and alternatively |
| Successfully enter firmware update process | After One high tone emit five quick short notes followed by a pause and then two notes. | Red and green LEDs keep flashing slowly and alternatively |
| Complete scanner configuration | A melody from high notes to low ones | |
| Switch to data-transmission mode | One high note followed by two low short notes | The orange LED keeps flashing rapidly. |
| Successful attempt to transmit all the data | One long beeping note sings first, and then a short note sounds after data is transmitted. | |
| Charging Attempt | | A solid red LED indicates the ongoing charge process. Once the charging is completed, the red LED will start flashing slowly as a full battery charge indication. |
| Unknown Failure | | Red LED flashes once as a warning. |
| Timeout for configuration mode | Two ascending notes and then three descending notes | |

| Functions | Beeper Sequence | LED indication |
|---|---|---|
| **Cable Mode** | | |
| Switch to Cable mode | A melody composed of three ascending notes, another two ascending notes and one comparatively high note | Green LED keeps flashing steadily |
| Turn off automatic charge | Two descending short notes | |
| Turn on automatic charge | Three high-pitched notes | |
| **Memory Mode** | | |
| Switch to Memory mode | Three ascending notes followed by a comparatively high note | Orange LED keeps flashing steadily |
| Successful attempt to erase all saved barcodes | Three high-pitched long sounds | |
| Successfully attempt to delete one single data | One note followed by two shorter sounds. | |
| **Bluetooth Mode** | | |
| Switch to Bluetooth mode | Three same low notes followed by one high note | Blue LED keeps flashing steadily |
| Successful Bluetooth pairing | Two consecutive notes | A solid Blue LED will indicate a successful attempt. |
| Terminate Bluetooth connection | Three descending notes | |
| Unsuccessful Bluetooth pairing | Three high-pitched beeping sounds | |

## 3-3. Leverage your Scanner with Button Triggers

Two supplementary button triggers, Scan Button and Small Trigger, are to provide fundamental functionality from reading a barcode to deleting a scanned record, but, more importantly, giving them a press sometimes enables you to save the efforts in conducting complex barcode-scanning practices. Although button triggers, due to their limits, would never suffice to cover all the major and minor tasks which setup barcodes always do, skillfully using these two buttons still serves the basic needs yet in a more convenient way. In the following section will demonstrate how to execute specific operations via either a push of single button or a trigger of the button combination.

### 3-3.1. Scan Action

To decode a barcode, you may simply give a gentle push of **Scan Button** to achieve the attempt.

### 3-3.2. Mode Switch

Please follow blew steps to switch among operation modes.

| Procedure |
| --- |
| (1) Hold **Scan Button** till LED light turns a solid color. |
| (2) Release **Scan Button**. |
| (3) The color of steadily flashing LED individually indicates the current operation mode: **green stands for Cable mode, orange for Memory mode, and blue for Bluetooth mode.** |

### 3-3.3. Turn on/off Charge

Please follow the below steps to turn on or off the automatic charge.

| Procedure |
| --- |
| (1) Switch to **Cable mode.** |
| (2) Hold **Small Trigger** to trigger off a rapidly blinking green LED light. |
| (3) While LED light is rapidly flashing, press down **Scan Button without releasing Small Trigger.** |
| (4) Release both **Scan Button** and **Small Trigger.** |

### 3-3.4. Deletion of One Single Data

Please follow the below steps to delete a specified barcode.

| Procedure |
| --- |
| (1) Switch to **Memeory Mode.** |
| (2) Push **Small trigger** while aiming your scanner at the barcode you want to delete. |
| (3) Release **Small Trigger.** |

### 3-3.5. Deletion of All Transmitted Data

Please follow the below steps to delete all the saved barcode.

| Procedure | |
|---|---|
| (1) | Switch to **Memory mode.** |
| (2) | Hold **Small Trigger** to trigger off a rapidly blinking orange LED light. |
| (3) | While LED light is rapidly flashing, press down **Scan Button without releasing Small Trigger.** |
| (4) | Release both **Scan Button** and **Small Trigger.** |

### 3-3.6. Transmission of Saved Barcode

Please follow the below steps to transmit the saved barcode in the memory.

| Procedure | |
|---|---|
| (1) | Hold **Small Trigger** till LED light turns solid color. |
| (2) | Release **Small Trigger** to enter data transmission mode. The rapidly blinking orange LED indicates the scanner is ready for data transmission. |
| (3) | Press down **Scan Button** to transmit all the saved barcode data. |

### 3-3.7. Pairing with Bluetooth Devices

Please follow the below steps to pair the scanner with other Bluetooth devices.

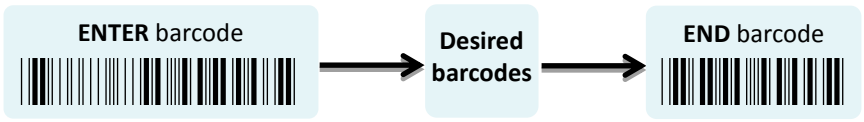
| Procedure | |
|---|---|
| (1) | Switch to **Bluetooth mode**. |
| (2) | Hold **Small Trigger** to trigger off a rapidly blinking LED light. |
| (3) | While LED light is rapidly flashing, press down **Scan Button without releasing Small Trigger.** |
| (4) | Release both **Scan Button** and **Small Trigger.** |

# 4. Quick Start

Through straightforward instructions provided in this chapter, you will shortly familize with fudamental operations of the scanner, and further know how to exloit the device in your tasks, instead of painstakingly researching into the whole manul. This how-to guide will focus more on general topics than specific or advanced subjects. If you are looking for the latter, please refer to other chapters for some detailed explanation.

## 4-1. Configuration Flowchart

Please make sure you always start a scan sequence with **ENTER** barcode and end with **END** barcode as a successful attempt. Both labels can also be located on the bottom of each page.




## 4-2. Set up your Scanner

### 4-2-1. Operation Mode

We offer a selection of mode combinations, including 2in1 and 3in1 functions, for your convenience to improve efficiency at work. Before reading the below barcodes, please scan Enter label first to ensure a successful configuration.

**Cable** A40C0

**Memory** A40C1

**Cable+Mem** A40C2

**Bluetooth** A40C3

**Cable+BT** A40C4

**Mem+BT** A40C5

**Cable+Mem+BT** A40C6

Enter



End

### 4-2-2. Output Interface in Cable Mode

After scanning Enter barcode, specify which output interface the device works with in Cable mode.

USB HID B21D1

USB COM B21D2

## 4-3. Basic Scanner Operations

You can perform most of below basic operations by either scanning the barcode sequences or using the button triggers.

### 4-3-1. Mode Switch

**Button Trigger**

Keep holding Scan Button till the LED light turns from a rapidly blinking color into a solid color. After a release of Scan Button, you, by observing the LED light colors, can learn which operation mode your scanner is switched to.

**Scan Sequence**

After reading **ENTER** label, scan the below appropriate barcode to switch to the desired operation mode.

To Cable Mode ZTOS

To BT Mode ZTOB

To Mem Mode ZTOM

Enter



End

## 4-3-2. Transmit All Barcode Data

### Button Trigger

1. Secure the interface cable to both the barcode reader and the Host PC Open the preferred word processing software to receive the scanned data.
2. After holding Small Trigger long enough to trigger off a solid LED light, release Small Trigger.
3. While the orange LED starts flashing rapidly, press Scan Button once again to transmit all barcode data.

### Scan Sequence

Scan **Data Memory Tx** barcode after reading **Enter** label.

**Data Memory Tx** ZMTX

## 4-3-3. Clear All Saved Barcode Data

### Button Trigger

1. Configure the scanner to be in Memory mode.
2. While holding Small Trigger till orange LED starts blinking rapidly, press down Scan Button.
3. Release Scan Button and Small Trigger.

### Scan Sequence

First read **Enter** label, and then scan the following barcode:

**Data Memory Clear** ZFCA

## 4-3-4. Clear One Single Barcode Data

### Button Trigger

1. Configure the scanner to be in Memory mode.
2. Press down Small Trigger and scan the barcode you want to remove from the flash memory.

### 4-3-5. Auto-Delete All Transmitted Data

You may program the scanner by scanning **Enable** label to auto delete the barcode data that was just transmitted after reading **Enter** barcode.

**Disable** B87A0

**Enable** B87A1

### 4-3-6. Attempt Firmware Update

Please read **Enter** label first, and then scan **ISP** barcode before applying relative scanner firmware updates.

**ISP** ZISP

## 4-4. How to Make your Scanner Work with Bluetooth Dongle A-302

### 4-4-1. Pair with Bluetooth Dongle A-302

1. Make sure the Bluetooth dongle is well secured into the USB port of the Host PC.
2. Scan **ENTER** barcode.
3. Scan **To BT Mode** barcode to enter Bluetooth mode.

**To BT Mode** ZTOB

4. Press down either Scan Button or Small Trigger to establish Bluetooth connection. A solid Blue LED indicates a successful attempt.
5. Open the referred word processing software to receive the scanned barcode data.

## 4-4-2. Disable Pairing Function

Once a Bluetooth connection is established, **Disable** the pairing function, after scanning **Enter** barcode, to avoid the incident of mistakenly repeating the pairing process.

**Disable** BE280

**Pair** BE281

## 4-4-3. Type of Bluetooth Connection

The type of Bluetooth connection varies according to the Bluetooth device you attempt to pair the scanner with. Whenever you need to establish a Bluetooth connection, specify this information out of six alternatives provided.

**SPP Slave** BE1D1

**SPP Master** BE1D2

**HID** BE1D3

**iOS** BE1D4

**A303** BE1D5

**A302** BE1D6

# 5. Establish a Bluetooth Connection

MK-600W3 features handy scanner operations via Bluetooth technoglogy by offering great flexibility in the Bluetooth connection types, which enables you to connect your scanner with assorted wilreless Bluetooth devices. This chapter is thus to provide explanatory instructions on how to establish a Bluetooth connection between MK-600W3 with other Bluetooth devices.

# Establish a Bluetooth Connection

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## 5-1. Bluetooth Connection Reference Chart

Before you gear up for a Bluetooth connection, it is significant to figure out the type of wireless Bluetooth devices which the scanner is connected with since the associated procedures considerably vary with the device types. The below reference chart, as a precaution, shows the relation between available connection modes and their individual potential users to ensure a good start for a successful Bluetooth connection.

| Connection Mode | Potential Users |
|---|---|
| Slave | Those who intend to connect the scanner with third-party or built-in dongles and receive data via a terminal application<br>For Slave connection mode, the scanner remains inactive and waits for connection request. |
| Master | Those who intend to connect the scanner with third-party or built-in dongles and receive data via a terminal application<br>For Master connection mode, the scanner will take an active role in the pairing process, meaning it will actively search for available Bluetooth devices to establish a Bluetooth connection. |
| HID | Those who intend to connect the scanner with third-party or built-in dongles and receive data via the available word-processing applications, such Microsoft word, Notepad and so on. |
| iOS | Those who intend to receive data via iOS products, such as iPhone and iPad. |
| A-303 Dongle | Those who intend to establish a connection with Bluetooth dongle A-303. |
| A-302 Dongle | Those who intend to establish a connection with Bluetooth dongle A-302. |

## 5-2. Set up your Own Bluetooth Connection

As far as configurations of Bluetooth connection are concerned, this section aims to exemplify how you are able to establish a Bluetooth connection between MK-600W3 and Bluetooth devices in hands via step-by-step instructions.

### 5-2-1. Slave Connection Mode

**Step 1**

Configure the scanner either using the utility program or scanning programming barcodes programming. By means of **the utility program** provided, you need not worry about the incorrect barcode sequence which possibly leads to the unexpected and wrong result. However, another alternative, **scanning programming barcodes,** is still offered if you pursue a more efficient configuration of the device. In case that you would rather not take time to figure out how to exploit the utility program, directly scanning the sequence of **programming barcodes** will work for you.

*Scanning Programming Barcodes*

**1-1.** Configure **Output Interface** of the scanner to be **Slave** by scanning the sequence of barcodes as the below illustration shows.

**ENTER** /$%ENTR

**Slave** BE1D1

**END** ZEND

**1-2.** Configure **Mac Address** information to be the specified value “000000000000” by scanning the sequence of barcodes as the below illustration shows.

**ENTER** /$%ENTR

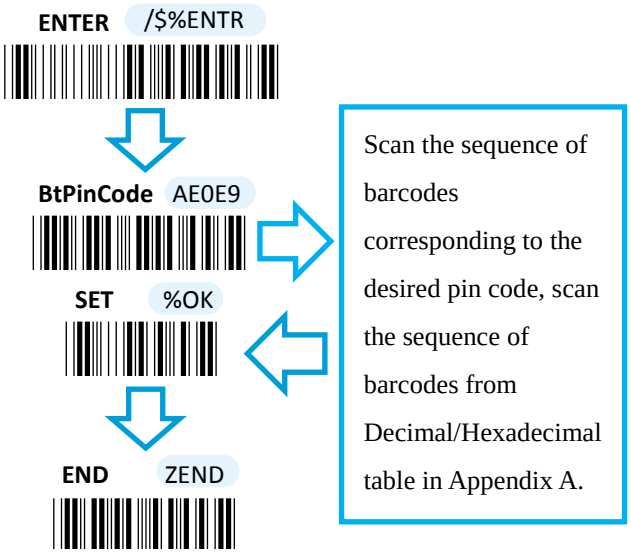
**BtMacAddr** AE8FE

Scan the sequence of barcodes corresponding to “000000000000” from Decimal/Hexadecimal table in Appendix A.

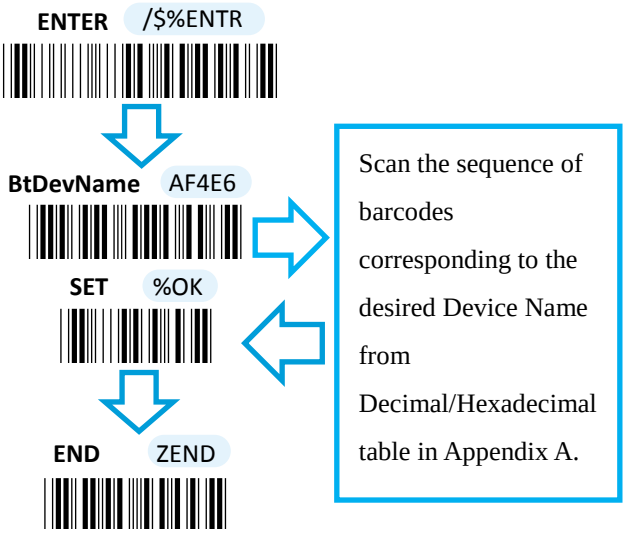
**SET** %OK

**END** ZEND

**1-3.** Configure **Pin Code** by scanning the sequence of barcodes as the below illustration shows.



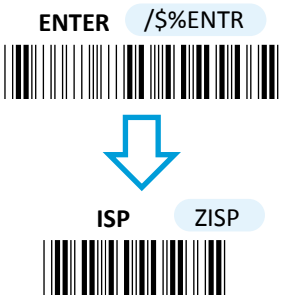

**1-4.** Configure **Device Name** by scanning the sequence of barcodes as the below illustration shows.



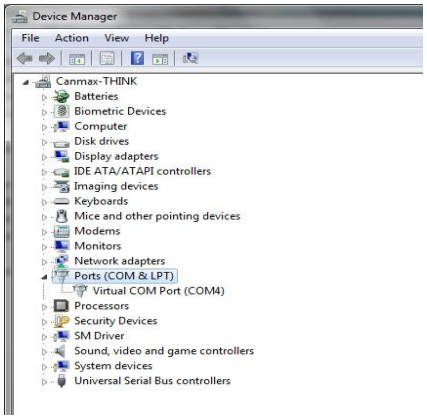

## *Using Utility Program*

**1-1.** Please have your scanner connected to Host PC using USB cable.

**1-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.



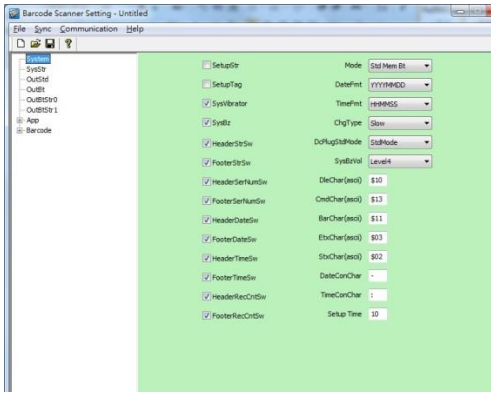

**1-3.** Go to **Control Panel> Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM4 is used as the virtual COM port.



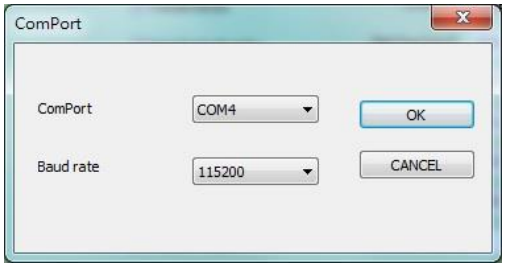
# Establish a Bluetooth Connection

5

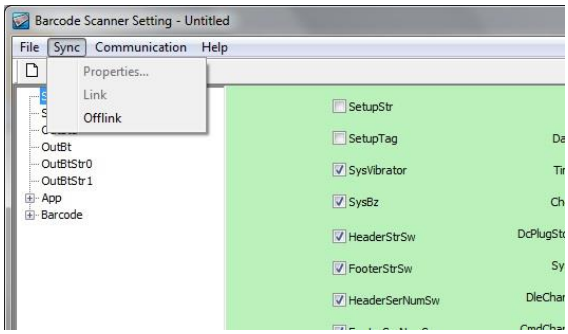
**1-4.** Invoke the utility program located in Product CD.



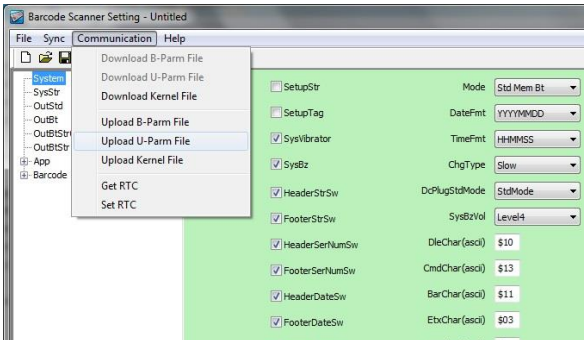
**1-5.** Select **Sync> Property.** In **ComPort** pop-up dialogue box, configure **ComPort** properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.



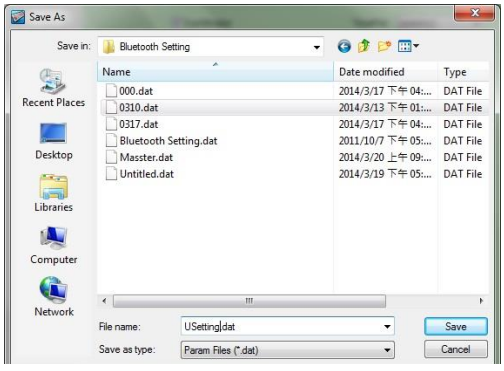

**1-6.** Select **Sync> Link** to link the scanner with the utility program. Once the link is successfully established, Link/Property options in Sync menu will be greyed out and the status bar will show associated information.




**1-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.

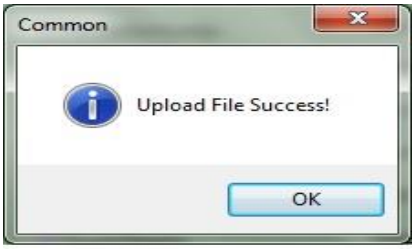



**1-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.

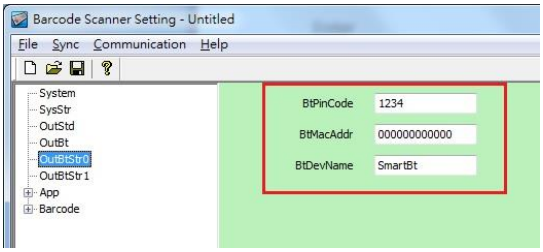


# Establish a Bluetooth Connection

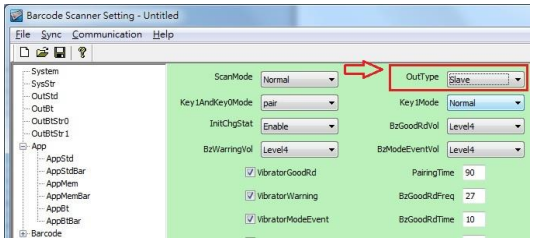
**1-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



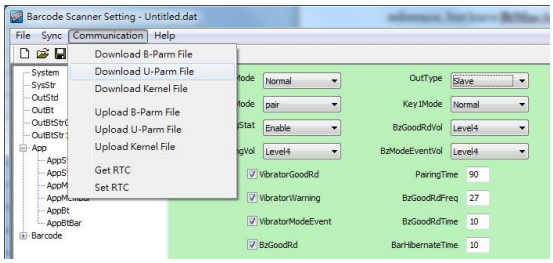

**1-10.** Click on **OutBtStr0** item of the tree view in the left panel. Afterwards, Configure **BtPinCode** and **BtDevName** according to your reference, but leave **BtMacAddr** with the default value, **000000000000**



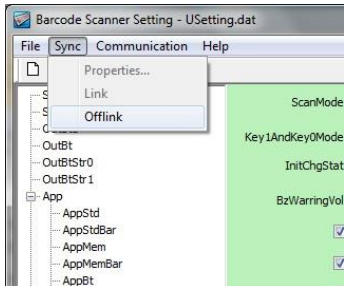

**1-11.** In the tree view, select **App**>**AppBt.** In the right panel, Select **Slave** in the **OutType** combo box. Then, click **Save** icon on the toolbar to save your settings.




**1-12.** Select **Communication**>**Download U-Parm file** to apply the cutomized settings to the scanner.




**1-13.** Select **Sync**> **Offlink** to complete the configuration.



## Step 2

Pair the scanner with third-party Bluetooth dongle.

**2-1.** Please have your scanner switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

- Scan the below barcode.

ENTER /$%ENTR → To BT Mode ZTOB

**2-2.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

- Scan the below barcode.

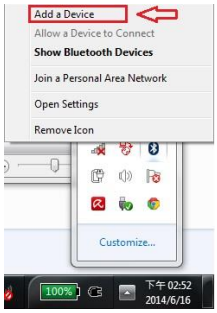
ENTER /$%ENTR → BT Pairing ZPAR

**IMPORTANT:** Please properly perform **Step 2-1 and 2-2** to ensure the dongle is able to detect the scanner at any time. While following the below steps to proceed with the configuration, please make sure that scanner always stays in Bluetooth mode and awaits a Bluetooth connection by an indication of a steadily flashing blue light. If the scanner is being put into sleep, press down either Scan Button or Small Trigger once to wake up the scanner.

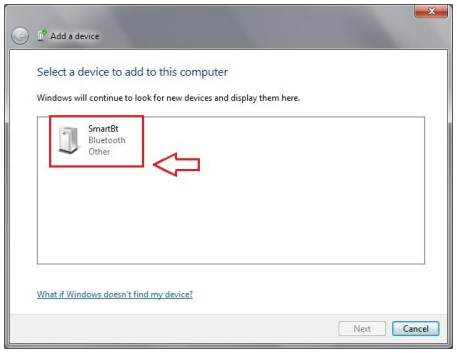
# Establish a Bluetooth Connection

**2-3.** Secure third-party dongle into Host PC and confirm the scanner stays active in Bluetooth mode.

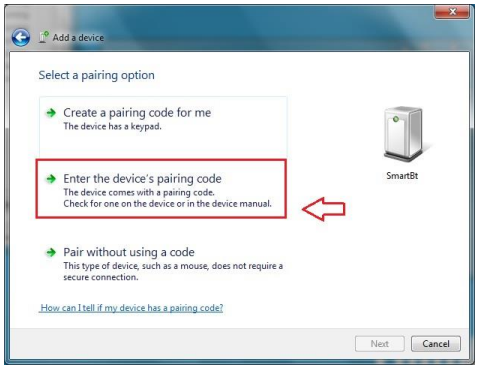
**2-4.** Right-click on Bluetooth icon on the taskbar and select **Add a Device** in the pop-up submenu.



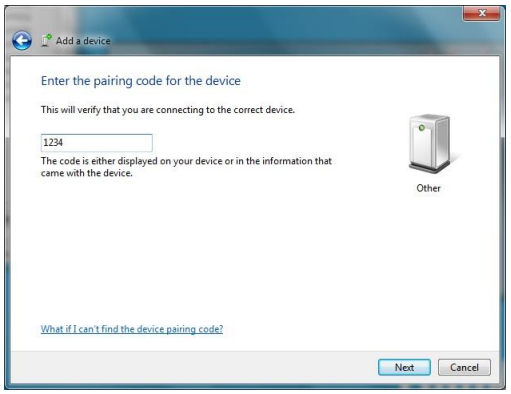

**2-5.** In the list box of **Add a Device** dialogue box will display all the available Bluetooth devices after a search. Select the device with the name which you specify for the scanner while using the utility application to program it. In this example, click on **SmartBt** item. Then, hit **Next** button.




**2-6.** Select **Enter the device's pairing code** and then hit **Next** button.

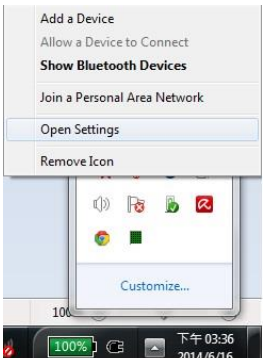



**2-7.** For verification, enter the valid passcode in Passcode field. In this example, input the passcode, **1234**.

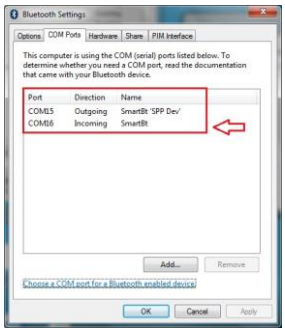


**2-8.** A message will appear to indicate the dongle and the scanner have been paired successfully. Press down **Close** button to close **Add a device** dialogue box.


**2-9.** Right-click on Bluetooth icon on the taskbar and then select **Open Settings** to look up the created outgoing COM port info.




**2-10.** In the **Bluetooth Setting** dialogue box, click on **COM ports** tab. From the list box of **COM Ports** tab, you are able to retrieve the outgoing COM ports information. Close dialogue box by hitting **OK** button. In this example, the outgoing COM port is set to COM15.



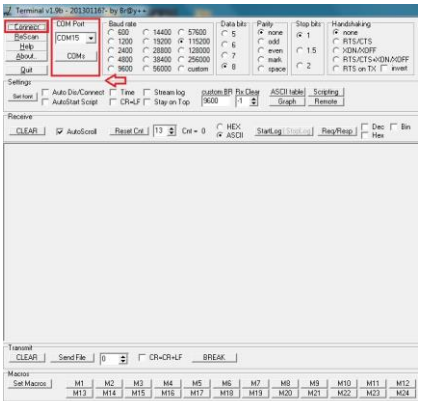
# Establish a Bluetooth Connection

## Step 3

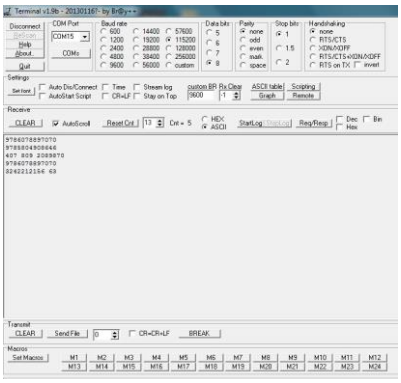
Configure the terminal software.

**3-1.** Launch the existing terminal emulation program. We will demonstrate the case with a free terminal emulation application, Terminal.

**3-2.** Properly set **COM Port** value according to information you obtain in **Step 2-10**, and then hit **Connect** button to ensure the termial application is connected. In this example, select COM15 from the combo box.



**3-3.** After a few seconds, the scanner will emit a short, rapid note along with a solid blue LED to indicate a successful Bluetooth connection. Now, you are able to receive barcode data via terminal software.



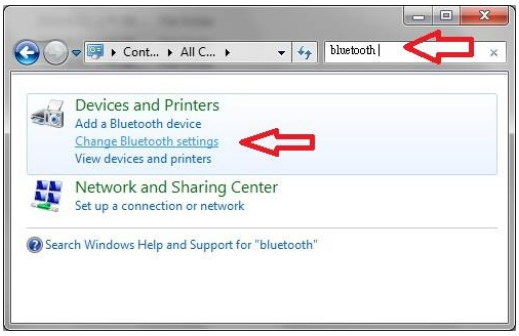
## 5-2-2. Master Connection Mode

### Step 1

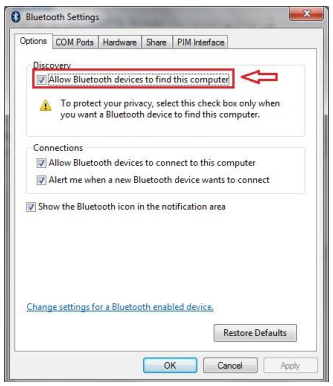
Configure Bluetooth settings, look up for the MAC address of your Bluetooth dongle, and create an incoming port.

**1-1.** Secure third-party Bluetooth dongle into Host PC.

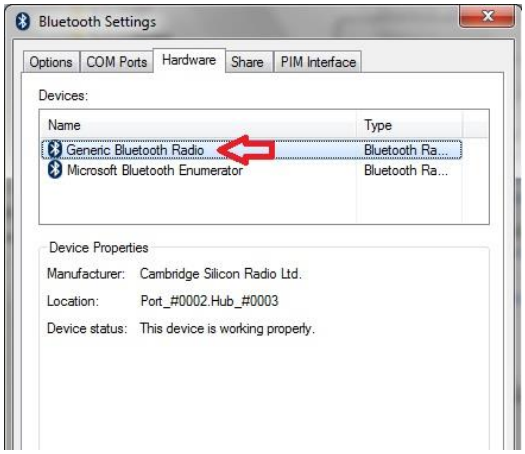
**1-2.** In **Control Panel**, type **Bluetooth** in search box. In the list of search results, click on **Change Bluetooth Settings** item.



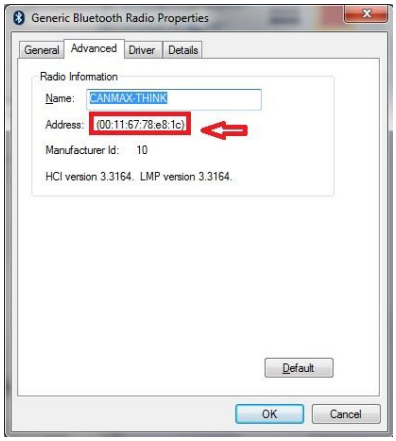

**1-3.** In **Bluetooth Settings**, click on **Options** tab to check **Allow Bluetooth devices to find this computer** option.



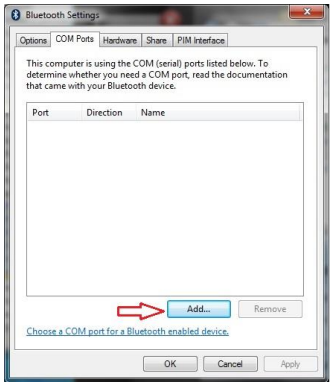

**1-4.** Switching to **Hardware** tab in the **Bluetooth Settings**, d-click on **Generic Bluetooth Radio** item in the **Device** list box.



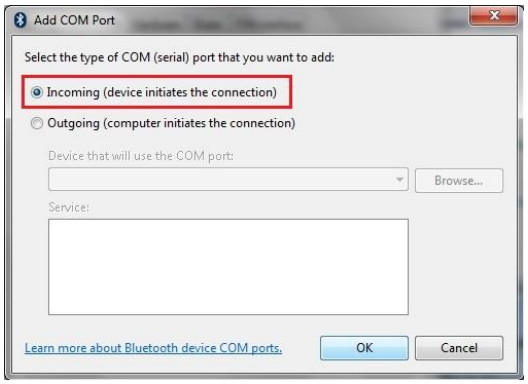
**1-5.** In **Generic Bluetooth Radio Properties**, retrieve MAC address of the plugged-in Bluetooth dongle, which is illustrated in the below figure and marked with red frame. Please write down the info for configuring your scanner later on. In this example, Mac address info is **00116778E81C**. Click **OK** button to return to **Bluetooth Settings**.




**1-6.** Click on **COM Ports** tab to add an incoming port. In **COM Ports** tab, hit **Add** button to invoke **Add COM Port** dialogue box.




**1-7.** In **Add COM Port** dialogue box, select **Incoming (device initiates the connection)** option and then hit **OK** button to initiate the process.




**1-8.** Once the incoming port is successfully generated, the list box in **COM Ports** tab will show associated information regarding the incoming port. In the example, the created incoming port is set to COM14. Press down **OK** button to close **Bluetooth Settings** dialogue box.

# Establish a Bluetooth Connection

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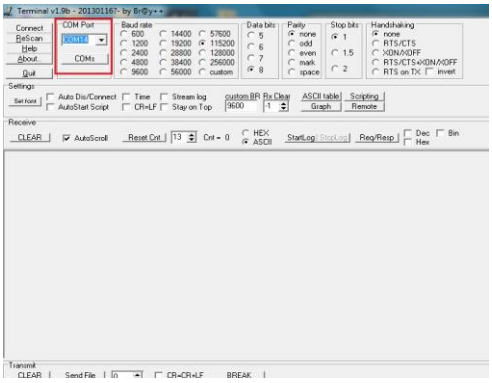
## Step 2

Configure the existing terminal application.

**2-1.** Run the terminal software. In the example, we will demonstrate the case with the free terminal emulation application, Terminal.

**2-2.** Correctly configure **COM Port** with the value matching the generated incoming COM port, and then press down **Connect** button to ensure the terminal application is connected. Keep the application running in the background.



## Step 3

Configure your scanner either using the utility program or scanning programming barcodes. Two alternatives take different approaches to serve the same purpose. Select **utility program** to set up the device if you incline to avoid from dealing with lengthy and problematic barcode sequences which constantly end up nullifying your efforts. For those who prefer a straightforward solution, it is suggested to scan the sequence of **programming barcodes** to have your device programmed before use.

### *Scanning Program Barcodes*

**3-1.** Configure **Output Interface** of the scanner to be **Master** by scanning the sequence of barcodes as the below illustration shows.

ENTER /$%ENTR

Master BE1D2

END ZEND

**3-2.** Configure **Mac Address** by scanning the sequence of barcodes as the below illustration shows.

ENTER /$%ENTR

BtMacAddr AE8FE

SET %OK

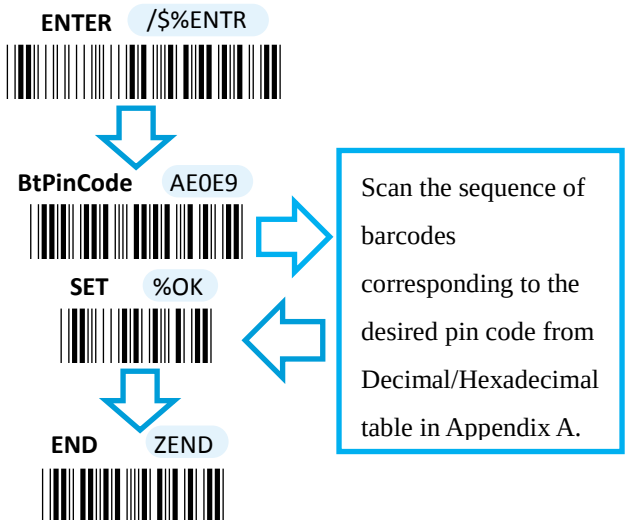
END ZEND

Scan the sequence of barcodes corresponding to the actual MAC address of the dongle from Decimal/Hexadecimal table in Appendix A.

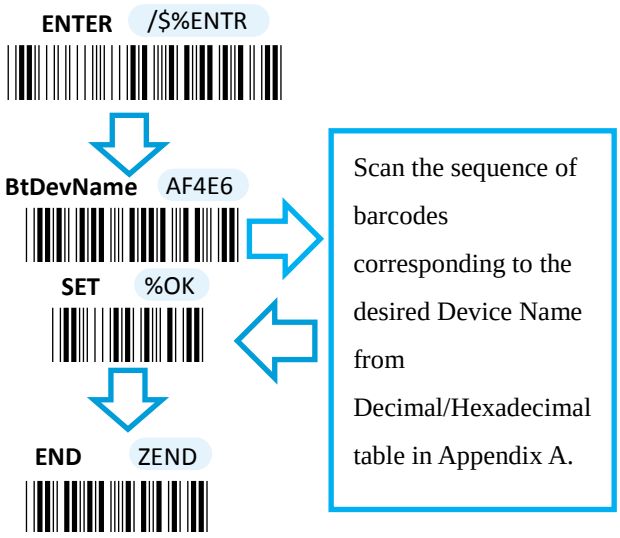
Enter

End

**3-3.** Configure **Pin Code** by scanning the sequence of barcodes as the below illustration shows.



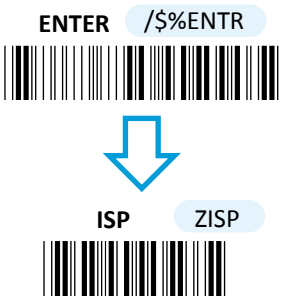

**3-4.** Configure **Device Name** by scanning the sequence of barcodes as the below illustration shows.



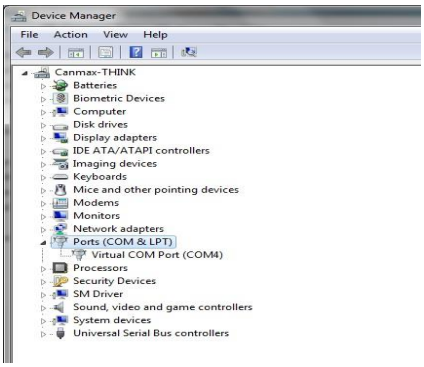

## *Using Utility Program*

**3-1.** Please have your scanner connected to Host PC using USB cable.

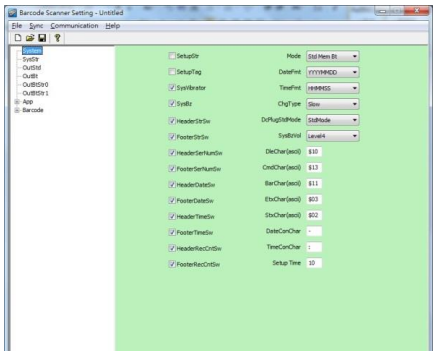
**3-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.



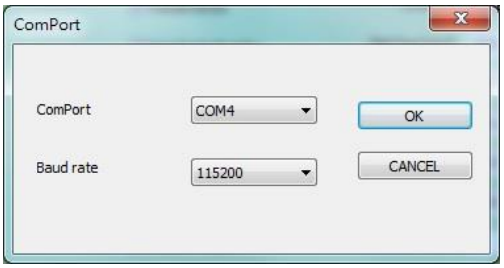

**3-3.** Go to **Control Panel** > **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM4 is used as the virtual COM port.



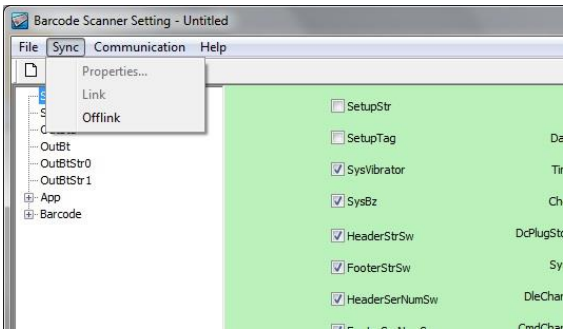
**3-4.** Invoke the utility program located in Product CD.



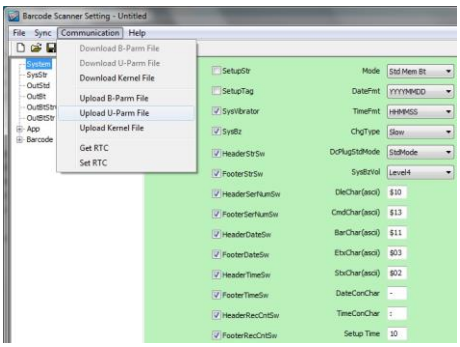
**3-5.** Select **Sync**> **Property**. In **ComPort** pop-up dialogue box, configure **ComPort** properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.



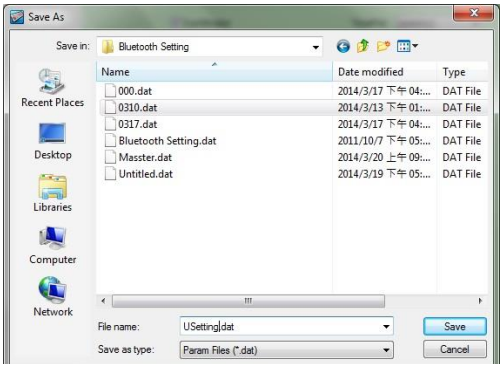

**3-6.** Select **Sync**>**Link** to link the scanner with the utility program. Once the link is successfully established, **Link/Property** options in Sync menu will be greyed out and the status bar will show associated information.



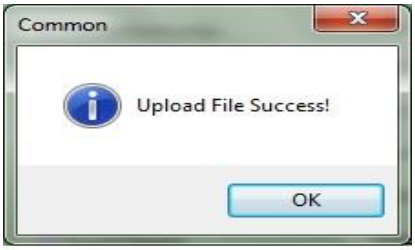

**3-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.



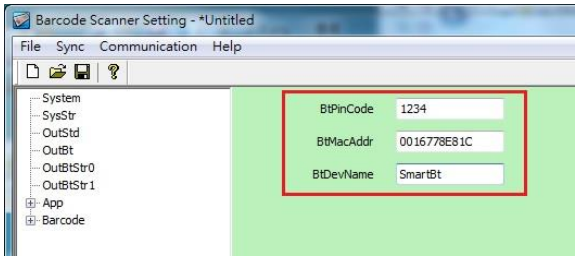

**3-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.



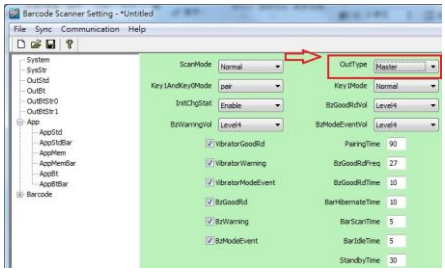
**3-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



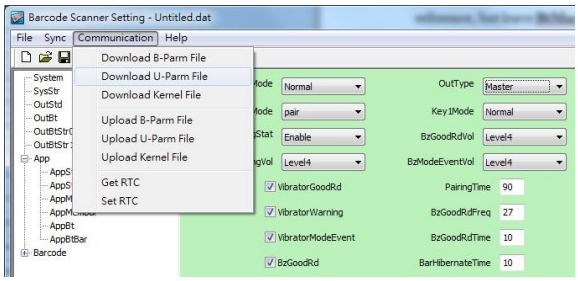

**3-10.** Click on **OutBtStr0** item of the tree view in the left panel. Afterwards, Configure **BtPinCode** and **BtDevName** according to your reference, but associate **BtMacAddr** with MAC address information of the Bluetooth device which you look up in the computer.



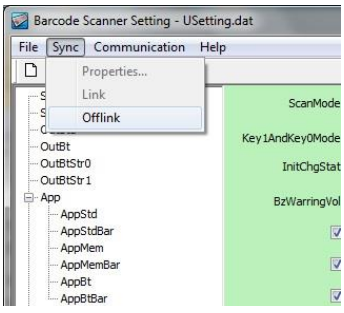

**3-11.** In the tree view, select **App**>**AppBt.** In the right panel, select **Master** in the **OutType** combo box. Then, click **Save** icon on the toolbar to save your settings.



**3-12.** Select **Communication**>**Download U-Parm file** to apply the customized settings to the scanner




**3-13.** Select **Sync**> **Offlink** to complete the configuration.



# Establish a Bluetooth Connection

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## Step 4

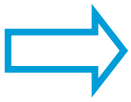
Initiate the process to pair the scanner with third-party Bluetooth dongle.

**4-1.** Please switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

- Scan the below barcode.

ENTER /$%ENTR



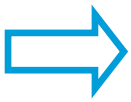
To BT Mode ZTOB

**4-2.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

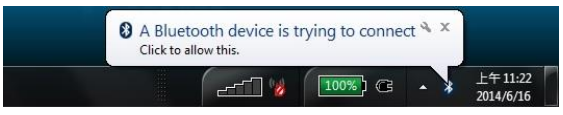
- Scan the below barcode.

ENTER /$%ENTR

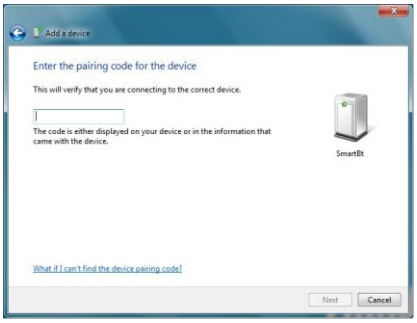


BT Pairing ZPAR

**4-3.** When Bluetooth device is detected, Bluetooth icon will appear on the taskbar with a pop-up message saying "a Bluetooth device is trying to connect". You have to timely click on the message to accordingly have **Add a device** dialogue box prompted before proceeding with the configuration.




**4-4.** In **Add a device** dialogue box, correctly enter the pairing code in Passcode field. Then, hit **Next** button to check the result.



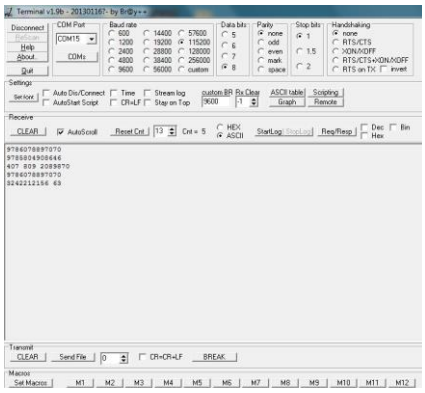

Enter



End

**4-5.** The appropriate message will pop up to indicate a success when the valid passcode is properly entered. If the passcode verification fails due to the timeout, please repeat the steps from **Step 4-2 to 4-4**.


**4-6.** Once Bluetooth connection is established successfully, switch back to the terminal application to start receiving barcode data.



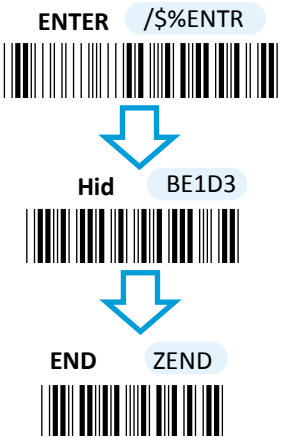
## 5-2-3. HID Connection Mode

### Step 1

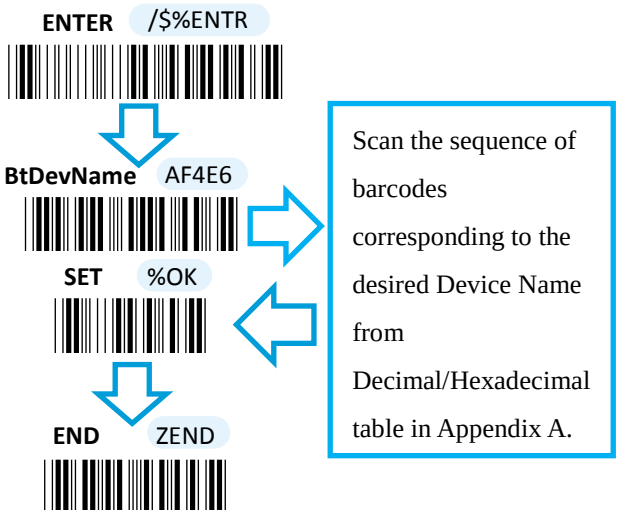
Configure your scanner either using the utility program or scanning programming barcodes. The convenience of **using utility program** will save you trouble scanning the sequence of barcode which demands great caution and high accuracy to work out the configuration. However, you may alternatively choose to **scan programming barcodes** to set up your scanner if you desire a time-saving configuration rather than a research into sophistication of utility program before using it. Considering all pros and cons mentioned above, please choose the one which works best for you.

### *Scanning Programming Barcodes*

**1-1.** Configure **Output Interface** of the scanner to be **HID** by scanning the sequence of barcodes as the below illustration shows.




**1-2.** Configure **Device Name** by scanning the sequence of barcodes as the below illustration shows.




Enter 

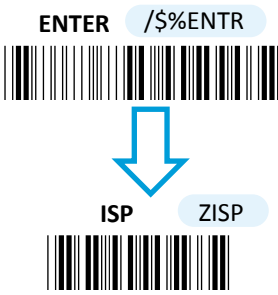


End 

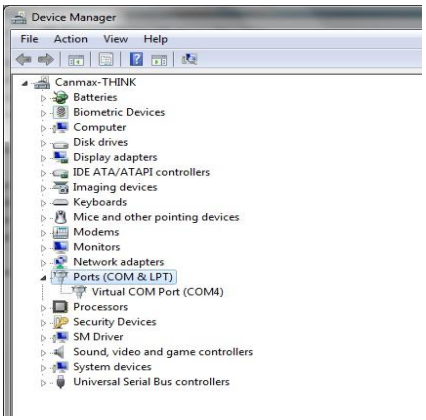
## *Using Utility Program*

**1-1.** Please have your scanner connected to Host PC using USB cable.

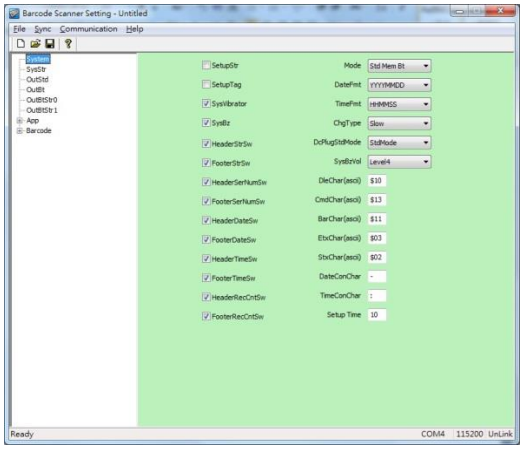
**1-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.



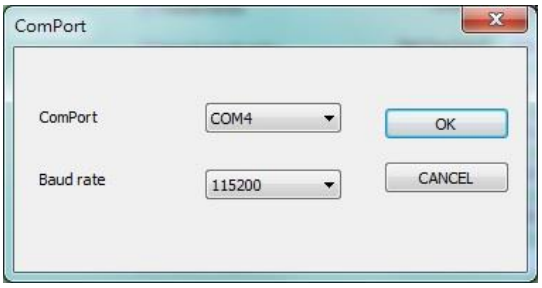

**1-3.** Go to **Control Panel**> **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM4 is used as the virtual COM port.



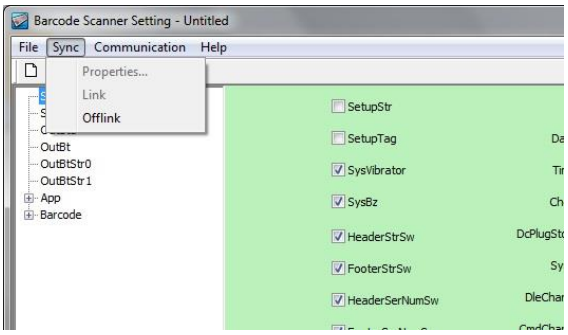

**1-4.** Invoke the utility program located in Product CD.



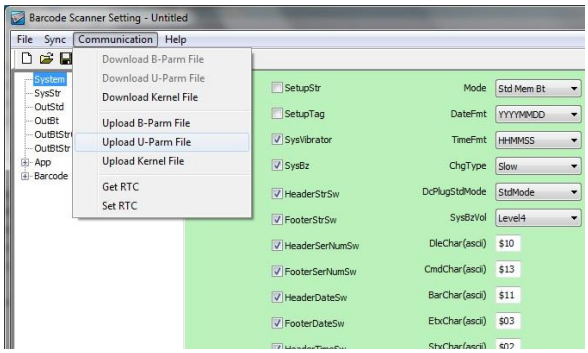
**1-5.** Select **Sync**> **Property**. In ComPort pop-up dialogue box, configure ComPort properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.



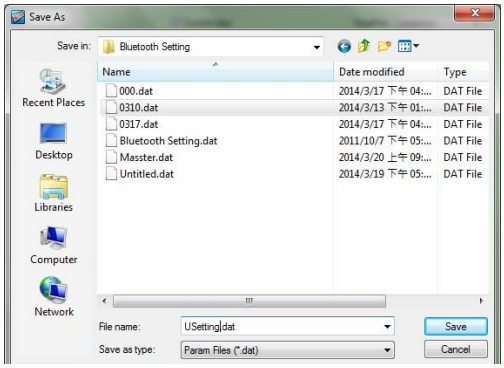

**1-6.** Select **Sync**> **Link** to link the scanner with the utility program. Once the link is successfully established, Link/Property options in Sync menu will be greyed out and the status bar will show associated information.



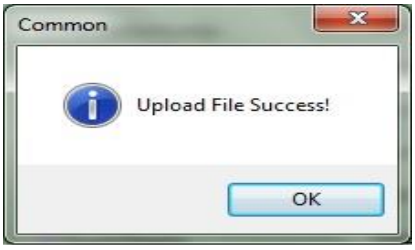

**1-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.



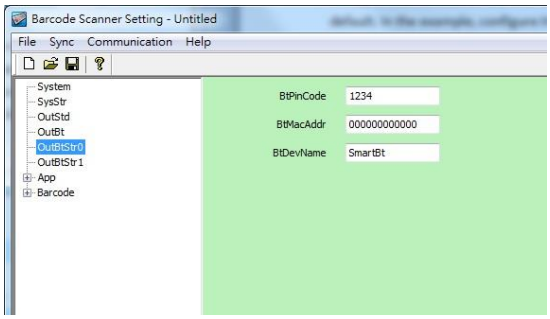

**1-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.



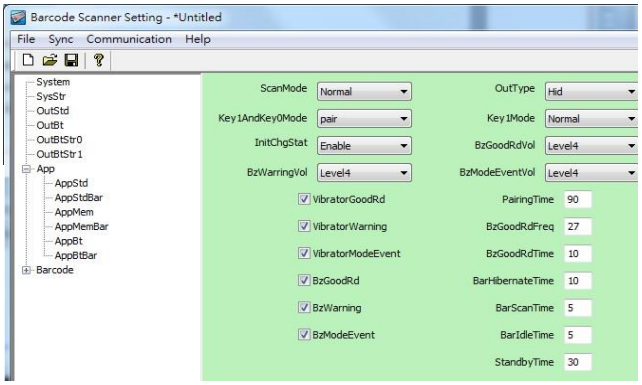

**1-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



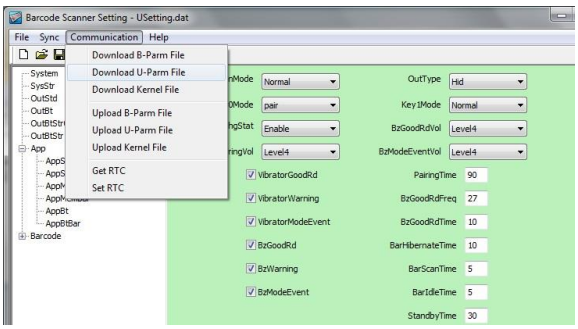
**1-10.** Click on **OutBtStr0** item of the tree view in the left panel. Afterwards, Configure **BtPinCode** and **BtDevName** according to your reference, but associate **BtMacAddr** with MAC address information of the Bluetooth device which you look up in the computer.



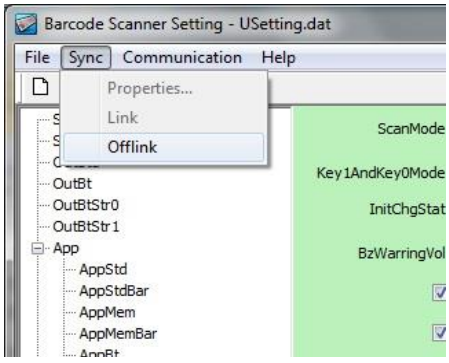

**1-11.** In the tree view, select **App**>**AppBt.** In the right panel, Select **HID** in the **OutType** combo box. Click Save icon on the toolbar to save your settings.




**1-12.** Select **Communication**>**Download U-Parm file** to apply the customized settings to the scanner.




**1-13.** Select **Sync**> **Offlink** to complete the configuration.



# Establish a Bluetooth Connection

## Step 2

Pair the scanner with third-party Bluetooth dongle.

**2-1.** Please have your scanner switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

- Scan the below barcode.

ENTER /$%ENTR → To BT Mode ZTOB

**2-2.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

- Scan the below barcode.

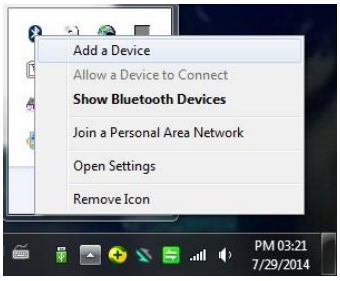
ENTER /$%ENTR → BT Pairing ZPAR

**IMPORTANT:** Please properly perform **Step 2-1 and 2-2** to ensure the dongle is able to detect the scanner at any time. While following the below steps to proceed with the configuration, please make sure that scanner always stays in Bluetooth mode and awaits a Bluetooth connection by an indication of a steadily flashing blue light. If the scanner is being put into sleep, press down either Scan Button or Small Trigger once to wake up the scanner.

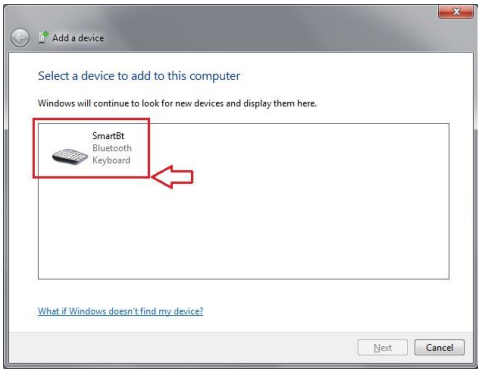
# Establish a Bluetooth Connection

5

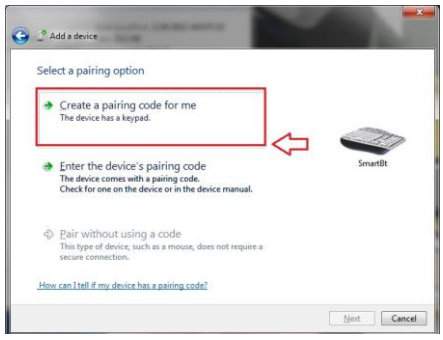
**2-3.** When Bluetooth device is detected, R-click on Bluetooth icon on the task bar, and select **Add a Device** in the pop-up submenu.



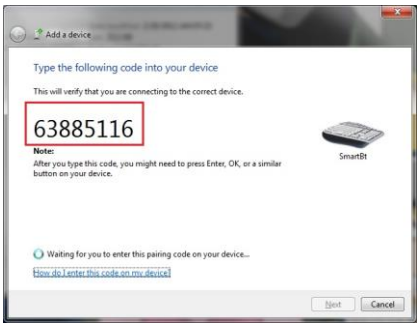

**2-4.** In **Add a Device** dialogue box, the list box will display all the available Bluetooth devices after a search. Select the device with the name which you specify for the scanner. In this example, click on **SmartBt** item. Then, hit Next button.



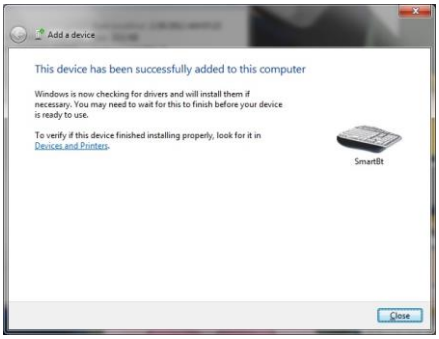

**2-5.** If the similar dialogue box appears as the below figure suggests (depending upon Bluetooth settings in your computer, the mentioned dialogue box may not show up), select **Create a pairing code for me** and then hit **Next** button. If not, skip to next step.




**2-6.** Refer to Decimal/Hexadecimal table in Appendix A to accurately scan the sequence of barcodes which matches to the generated code shown in the dialogue box for pin code verification. In this example, please scan **6,3,8,8,5,1,1,** and **6**.

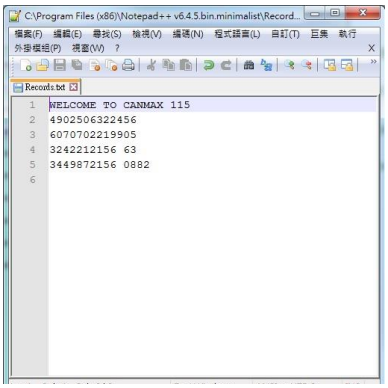



**2-7.** A message will appear to indicate the dongle and the scanner have been paired successfully. Press down **Close** button to close **Add a device** dialogue box.



## Step 3

Launch the existing text editing application to receive barcode data.



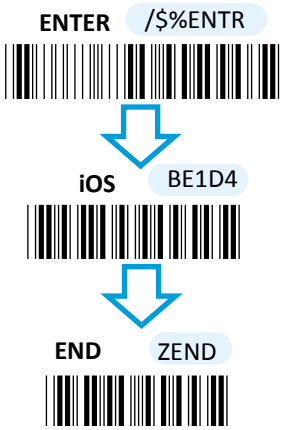
## 5-2-4. iOS Connection Mode

### Step 1

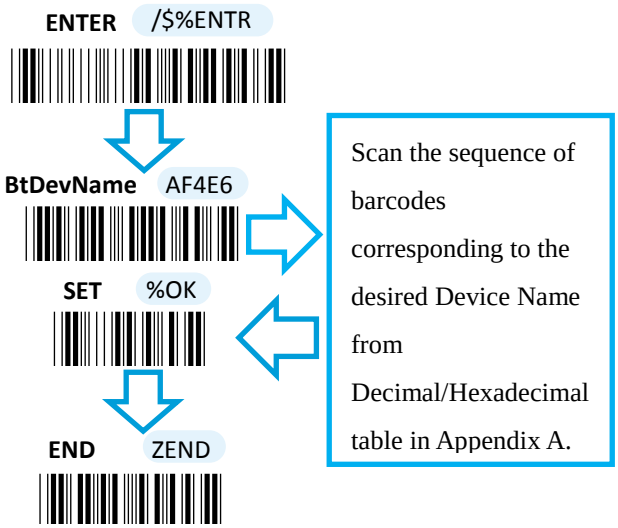
Configure your scanner either using the utility program or scanning programming barcodes. The primary advantage of **using the utility program** is to prevent the invalid configuration which frequently happens due to the incorrect and reckless scanning sequence. However, it requires extra pre-configuration procedures before the utility program can be executed properly. On the other hand, the use of **barcode programming sequence** will lead to a rapid and efficient configuration for your scanner instead of taking time to dig into the seemingly confusing application. Considering all pros and cons mentioned above, choose the one which fits for your situation.

### *Scanning Programming Barcodes*

**1-1.** Configure **Output Interface** of the scanner to be **iOS** by scanning the sequence of barcodes as the below illustration shows.




**1-2.** Configure **Device Name** by scanning the sequence of barcodes as the below figure show. By default, Device name is set to "SmartBt."



## *Using Utility Program*

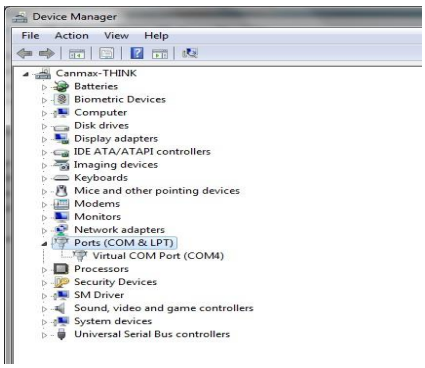
**1-1.** Please have your scanner connected to Host PC using USB cable.

**1-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.

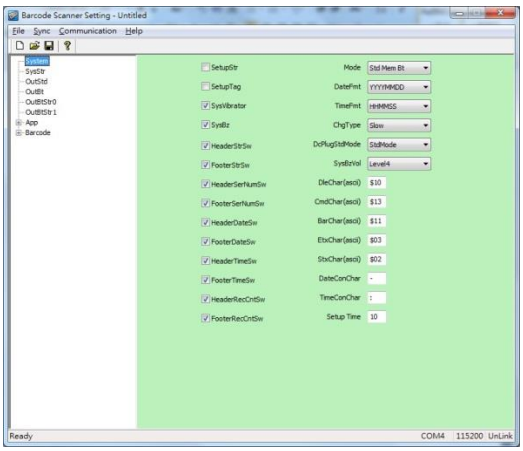
ENTER /$%ENTR

ISP ZISP

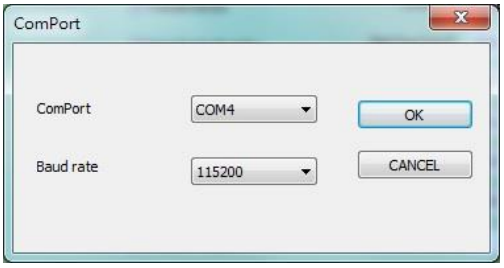
**1-3.** Go to **Control Panel**> **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM3 is used as the virtual COM port.



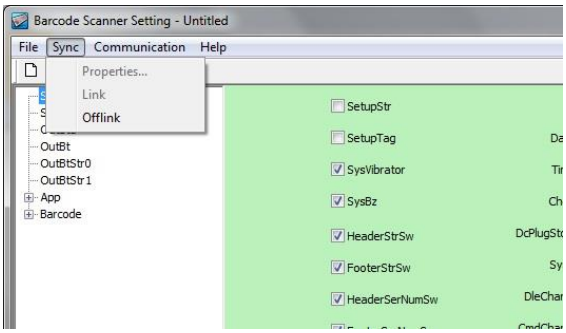

**1-4.** Invoke the utility program located in Product CD.



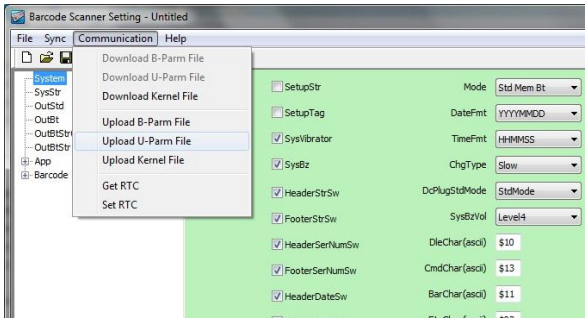
**1-5.** Select **Sync**> **Property**. In **ComPort** pop-up dialogue box, configure **ComPort** properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.



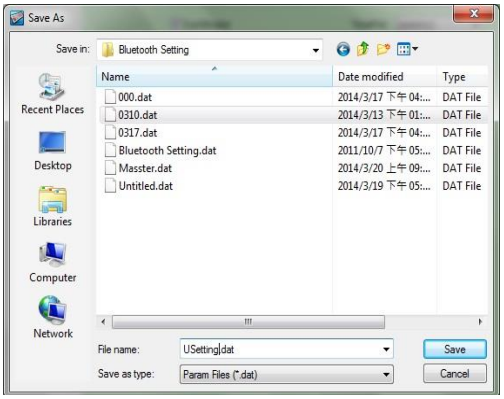

**1-6.** Select **Sync**>**Link** to link the scanner with the utility program. Once the link is successfully established, **Link/Property** options in Sync menu will be greyed out and the status bar will show associated information.



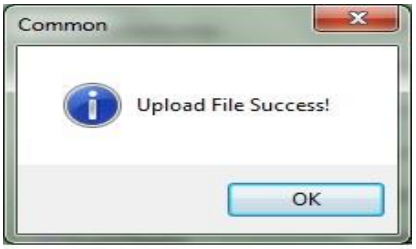

**1-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.



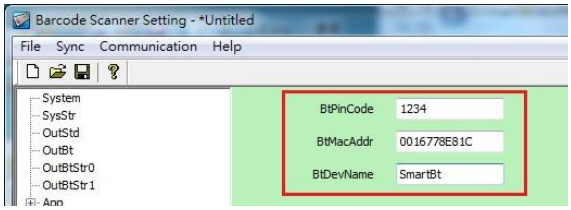

**1-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.



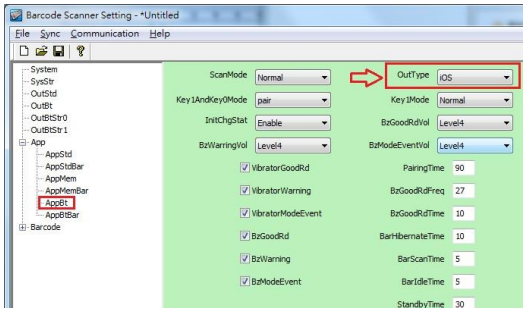

**1-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



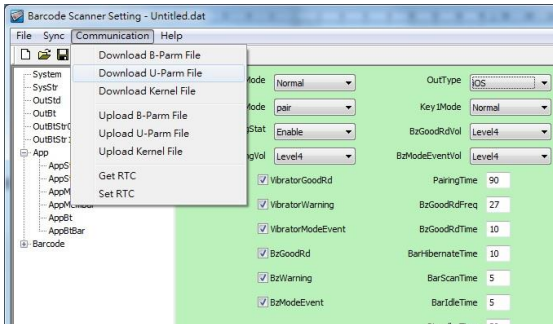
**1-10.** Click on **OutBtStr0** item of the tree view in the left panel. Afterwards, Configure **BtPinCode** and **BtDevName** according to your reference, but associate **BtMacAddr** with MAC address information of the Bluetooth device which you look up in the computer.



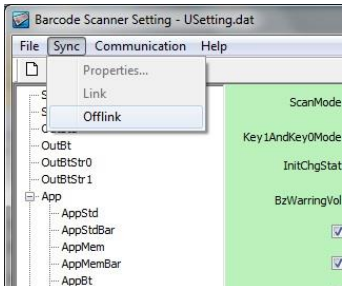

**1-11.** In the tree view, select **App**>**AppBt.** In the right panel, select **iOS** in the **OutType** combo box. Then, click **Save** icon on the toolbar to save your settings.




**1-12.** Select **Communication**>**Download U-Parm file** to apply the customized settings to the scanner.




**1-13.** Select **Sync**> **Offlink** to complete the configuration.



# Establish a Bluetooth Connection

## Step 2

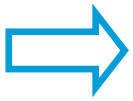
Initiate the process to pair the scanner with third-party Bluetooth dongle.

**2-1.** Please switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

- Scan the below barcode.

ENTER /$%ENTR



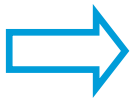
To BT Mode ZTOB

**2-2.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

- Scan the below barcode.

ENTER /$%ENTR



BT Pairing ZPAR

**IMPORTANT:** In order to pair the scanner with iPad, please make sure that scanner always stays in Bluetooth mode and awaits a Bluetooth connection by an indication of a steadily flashing blue light. If the scanner is being put into sleep, press down Scan Button or Small Trigger to wake up the scanner; or, repeat **Step 2-2** when the timeout period expires.

# Establish a Bluetooth Connection

5

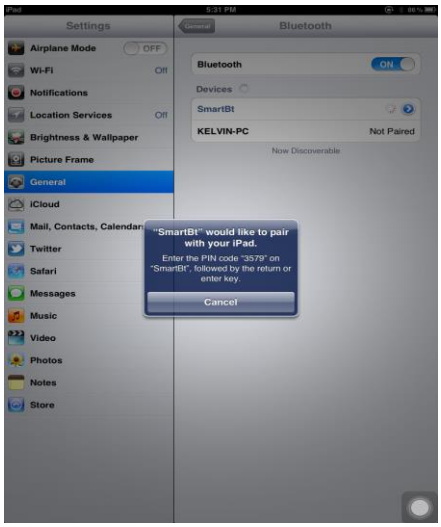
## Step 3

Configure your Apple products. In this example, we will demonstrate the case with iPad.

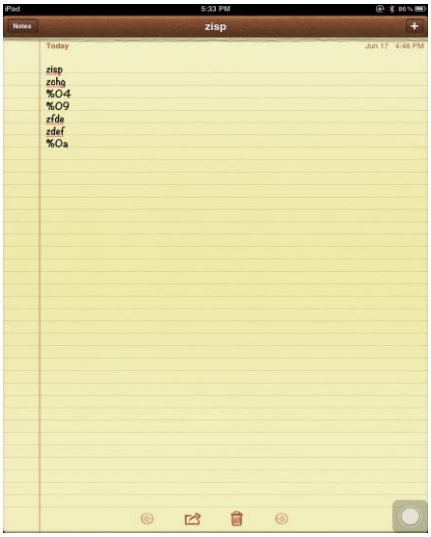
**3-1.** Activate your iPad. Tap **Setting**, go to **General**> **Bluetooth**, and then turn on **Bluetooth** settings.


**3-2.** From the list of available Bluetooth devices in range, Click on the device which you intend to pair iPad with.


**3-3.** According to pop-up message, correctly scan the passcode for verification. In this example, please read the sequence of decimal barcodes, 3-5-7-9. Repeat this step till it succeeds.




**3-4.** Once iPad successfully pairs with the scanner, press Home button to return to Home page. Then, tap **Notes** to receive barcode data.



## 5-2-5. Bluetooth Dongle A303 Connection Mode

Bluetooth Dongle A303 is a specialized Bluetooth peripheral device adapted for use of MK-600W3 via HID or SPP interface in attempt to leverage Bluetooth technology. An optional purchase of Bluetooth dongle A303 could prevent you from going through the complicated configuration since it is well programmed beforehand with all the necessary Bluetooth settings before the delivery. Accordingly, performing Bluetooth operations out of MK-600W3 for the very first time simply demands a press of button to recover the Bluetooth connection unless the scanner is re-programmed to pair with third-party dongle or other Bluetooth devices previously. In case that you possibly adopt a different approach to establish a Bluetooth connection for whatever reasons, the step-by-step instruction is still provided so that you are able to make MK-600W3 work with Bluetooth dongle A303

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**Work with Dongle A303 for the First Time Use**

### Step 1

Secure the Bluetooth dongle A303 into Host PC.

### Step 2

Scan the sequence of barcodes listed below to switch the scanner to Bluetooth operation mode.

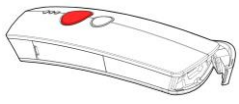
**ENTER** /$%ENTR

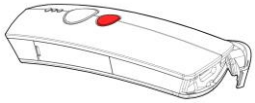
⇩

**To BT Mode** ZTOB

### Step 3

Press down either Scan Button or Small Trigger to recover Bluetooth connection. A solid blue LED indicates a successful attempt.





# Establish a Bluetooth Connection

5

**How to Re-Configure your Scanner to Work with Dongle A303**

## Step 1

Configure your scanner either using the utility program or scanning programming barcodes. The approach of **utility program** will help you accurately program your device with no need to go through the sequence of barcode scans which occasionally produces erroneous results due to the lack of cares. As another alternative, **scanning programming barcodes** would work better if you rather adopt a more time-saving approach than allocate time or other resources to familiarize with the utility program.

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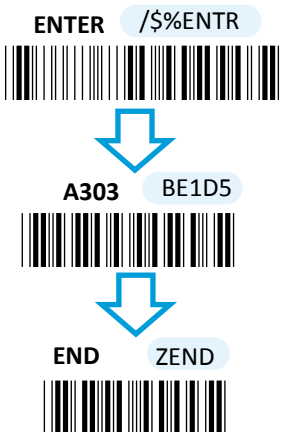
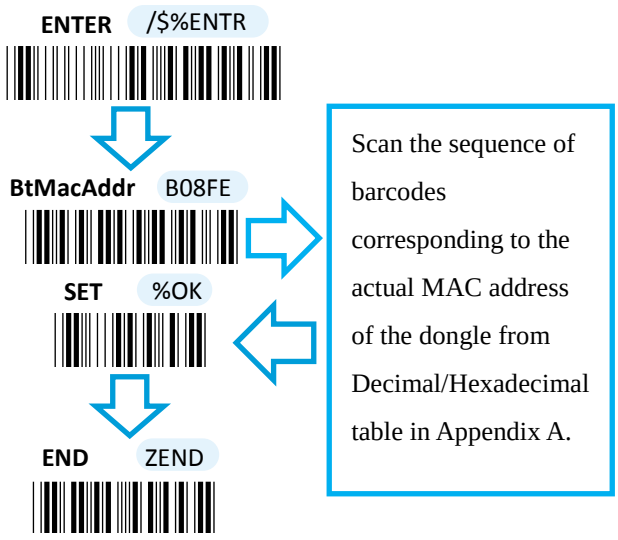
### *Scanning Programming Barcodes*

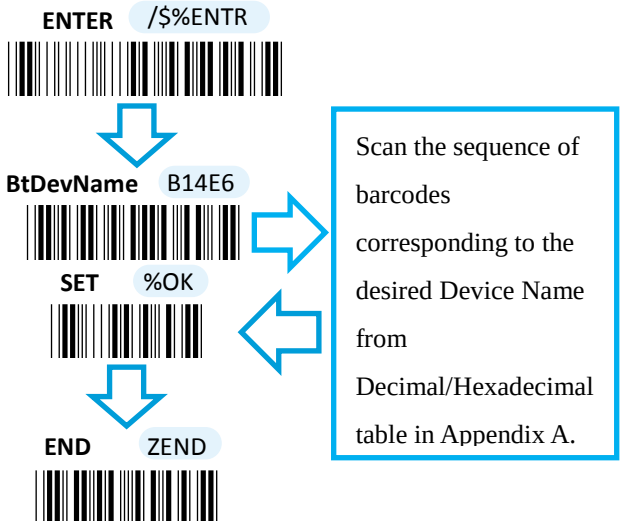
**1-1.** Configure **Output Interface** of the scanner to be **A303** by scanning the sequence of barcodes as the illustration on the right side shows.




**1-2.** Retrieve Mac Address info on the side of Bluetooth dongle A303, and then configure **Mac Address** by scanning the sequence of barcodes as the below illustration shows.




**1-3.** Configure **Device Name** by scanning the sequence of barcodes as the below illustration shows.




Enter



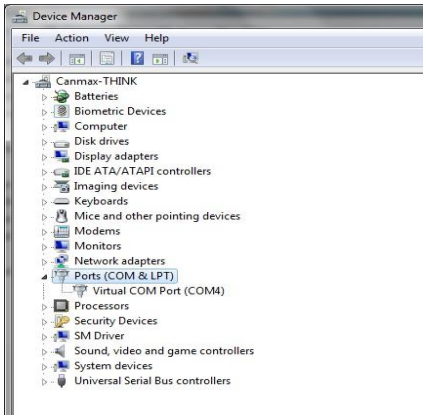
End

## *Using Utility Program*

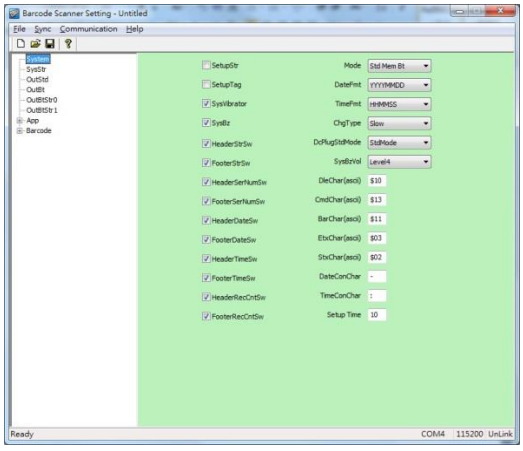
**1-1.** Please have your scanner connected to Host PC using USB cable.

**1-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.

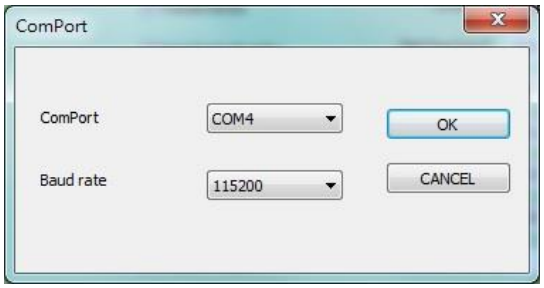

**1-3.** Go to **Control Panel**> **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM3 is used as the virtual COM port.




**1-4.** Invoke the utility program located in Product CD.

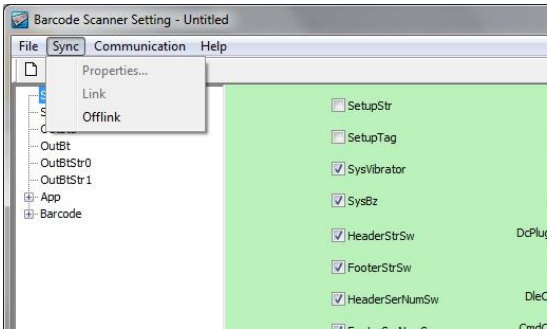


**1-5.** Select **Sync**> **Property**. In ComPort pop-up dialogue box, configure ComPort properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.

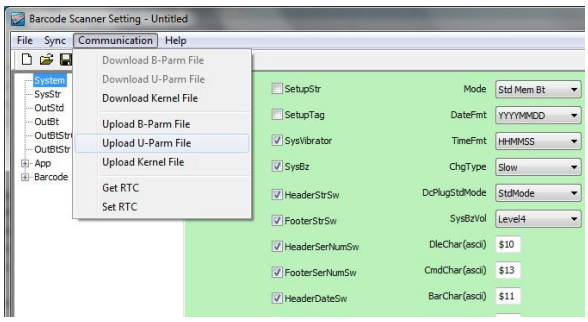


# Establish a Bluetooth Connection

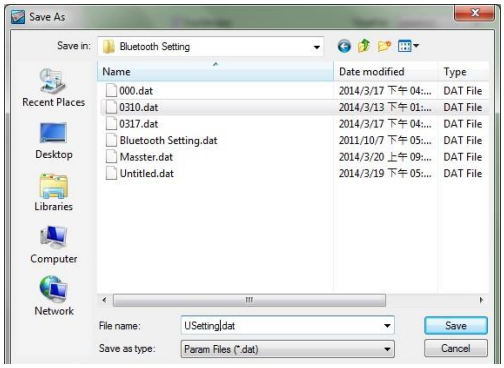
**1-6.** Select **Sync**> **Link** to link the scanner with the utility program. Once the link is successfully established, Link/Property options in Sync menu will be greyed out and the status bar will show associated information.



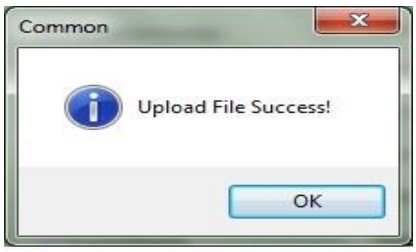

**1-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.




**1-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.

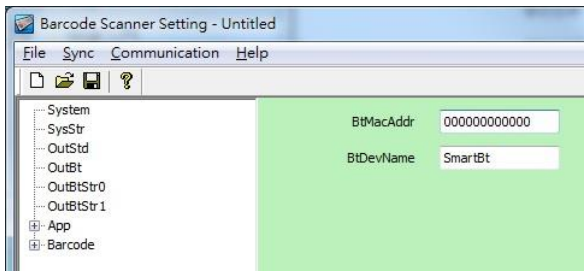



**1-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



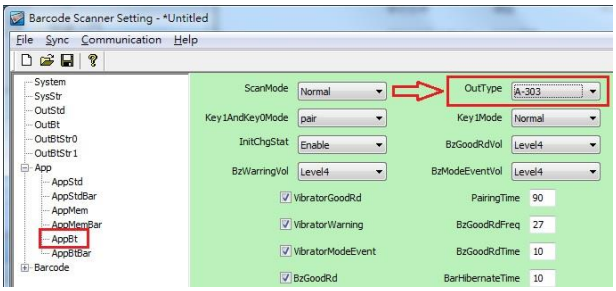
# Establish a Bluetooth Connection

**1-10.** Click on **OutBtStr1** item of the tree view in the left panel. Afterwards, Configure **BtDevName** according to your reference, but associate **BtMacAddr** with MAC address information which is clearly marked on the side of Bluetooth dongle A303. In this example, the MAC address is **001C97FR16EA**.

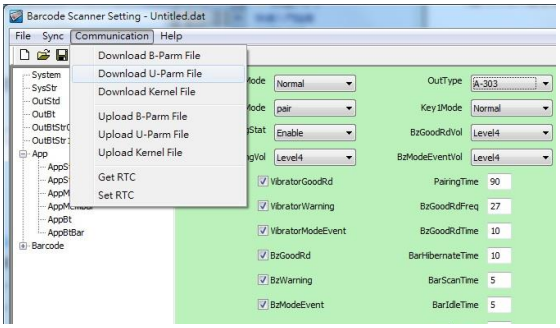




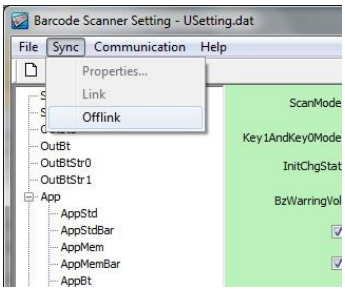
**1-11.** In the tree view, select **App**>**AppBt.** In the right panel, select **A303** in the **OutType** combo box. Click Save icon on the toolbar to save your settings.




**1-12.** Select **Communication**>**Download U-Parm file** to apply the customized settings to the scanner.




**1-13.** Select **Sync**> **Offlink** to complete the configuration.



## Step 2

Pair the scanner with third-party Bluetooth dongle.

**2-1.** Please have your scanner switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

### *Using Button Triggers*

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

### *Scanning Programming Barcodes*

- Scan the below barcode.


**2-2.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

### *Using Button Triggers*

- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

### *Scanning Programming Barcodes*

- Scan the below barcode.

# Establish a Bluetooth Connection

## Step 3

Properly scan the sequence of barcodes to determine the output interface via which the scanner interacts with other devices. To configure output interface, there are two interface options, HID interface and Virtual COM interface, for you to select from.

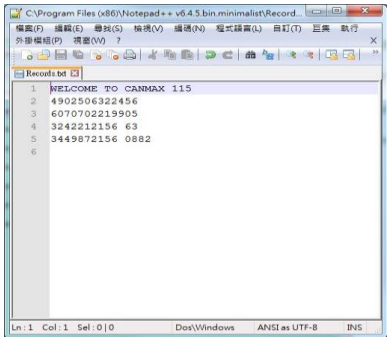
### *HID Interface*

**3-1.** Scan the below barcodes to activate HID interface.

ENTER /$%PROG

Keyboard /$%ZKBD

**3-2.** Launch the existing text editing software to receive barcode data.



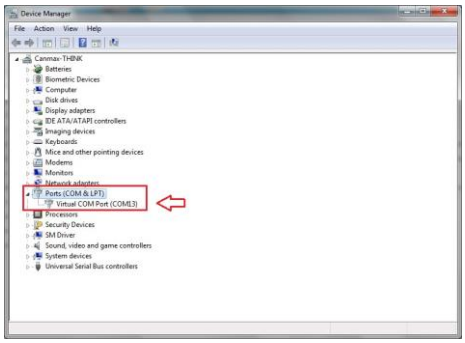

### *Virtual COM Interface*

**3-1.** Scan the below barcodes to activate Virtual COM interface.

ENTER /$%PROG

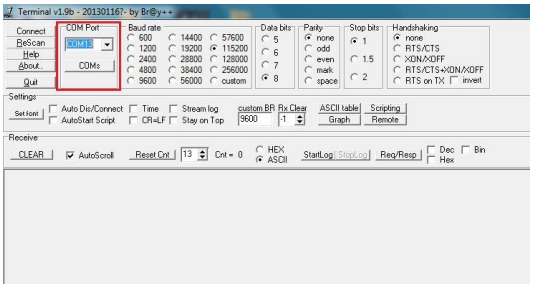
RS232 Default /$%Z232

**3-2.** Go to **Control Panel**> **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM13 is used as the virtual COM port.

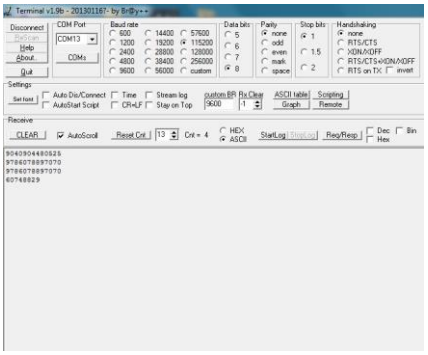


**3-3.** Run the terminal software. In the example, we will demonstrate the case with a free terminal emulation application, Terminal.

**3-4.** Correctly configure **COM Port** with the value matching the generated virtual COM port, and then press down **Connect** button to ensure the terminal application is connected.




**3-5.** Now you are able to receive barcode data via terminal software.



## 5-2-6. Bluetooth Dongle A302 Connection Mode

Bluetooth Dongle A302 is a specialized Bluetooth peripheral device adapted for use of MK-600W3 via HID interface in attempt to leverage Bluetooth technology. An optional purchase of Bluetooth dongle A302 could prevent you from going through the complicated configuration since it is well programmed beforehand with all the necessary Bluetooth settings before the delivery. Accordingly, performing Bluetooth operations out of MK-600W3 for the very first time simply demands a press of button to recover the Bluetooth connection which is earlier configured unless the scanner is re-programmed to pair with third-party dongle or other Bluetooth devices. In case that you possibly adopt a different approach to establish a Bluetooth connection for whatever reasons, the step-by-step instruction is still provided so that you are able to make MK-600W3 work with Bluetooth dongle A302 again.

**Work with Dongle A302 for the First Time Use**

### Step 1

Secure the Bluetooth dongle A302 into Host PC.

### Step 2

Scan the sequence of barcodes listed below to switch the scanner to Bluetooth operation mode.

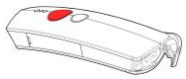
**ENTER** /$%ENTR

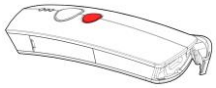
⇩

**To BT Mode** ZTOB

### Step 3

Press down either Scan Button or Small Trigger to recover Bluetooth connection. A solid blue LED indicates a successful attempt.





# Establish a Bluetooth Connection

5

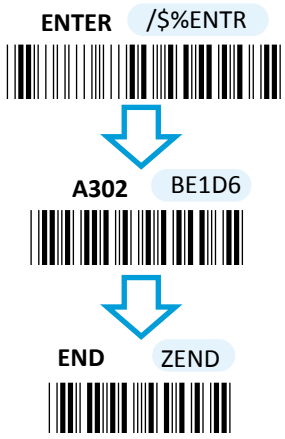
**How to Re-Configure your Scanner to Work with Dongle A302**

## Step 1

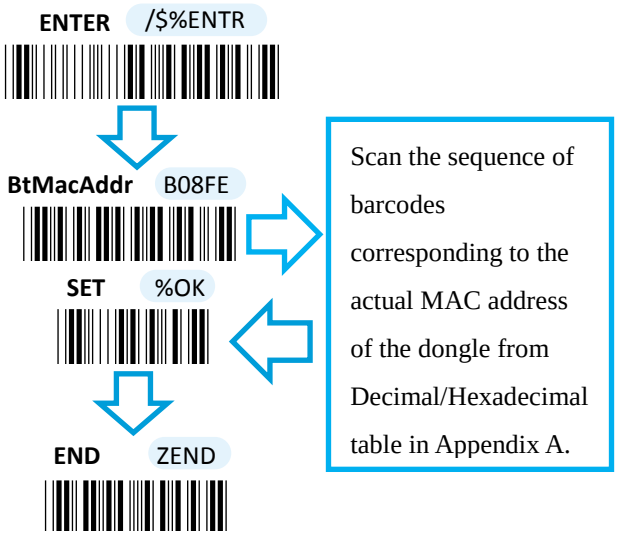
Configure your scanner either using the utility program or scanning programming barcodes. Select **utility program** to set up scanner when you expect to reduce the mistakes caused by incautious manual operation on barcode sequences. As a substitute, **scanning programming barcodes** alternatively provides a more efficient and straightforward method for programming your device, compared to the complicated approach of using utility program.

### *Scanning Programming Barcodes*

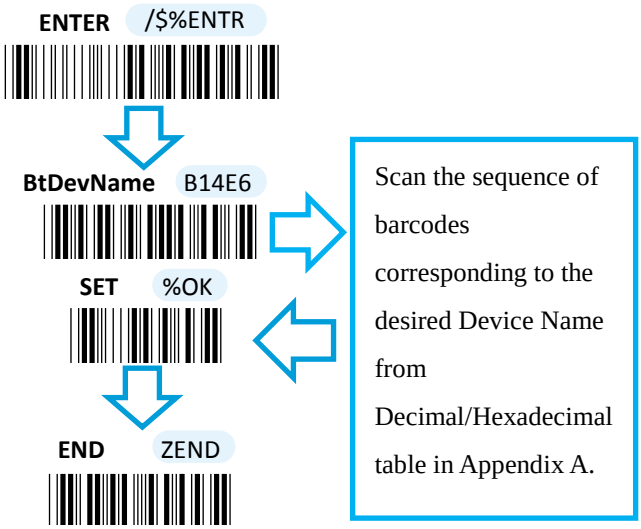
**1-1.** Configure **OutputInterface** of the scanner to be **A302** by scanning the sequence of barcodes as the illustration on the right side shows.




**1-2.** Retrieve Mac Address info on the side of Bluetooth dongle A302, and then configure **Mac Address** by scanning the sequence of barcodes as the below illustration shows.




**1-3.** Configure **Device Name** by scanning the sequence of barcodes as the below illustration shows.



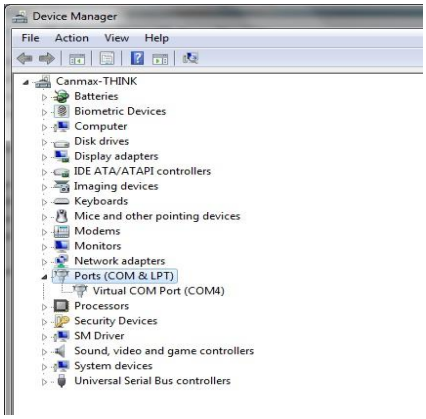
# Establish a Bluetooth Connection

## *Using Utility Program*

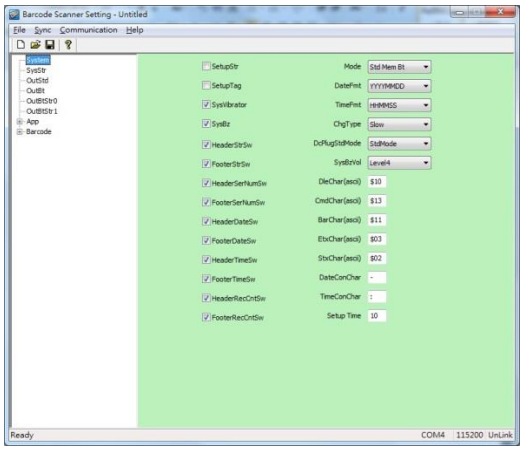
**1-1.** Please have your scanner connected to Host PC using USB cable.

**1-2.** To create a virtual COM port for the utility to access your scanner, Read **Enter** label > scan **ISP** barcode. The scanner will emit one long sound and six short, rapid sounds followed by two short, slow sounds as a successful attempt.

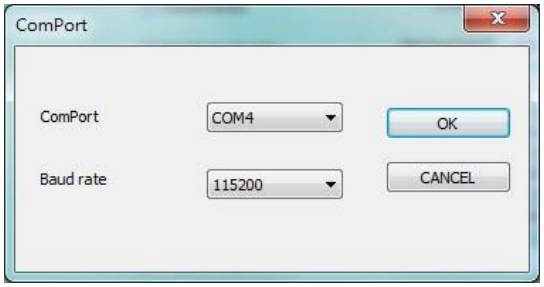

**1-3.** Go to **Control Panel**> **Device Manager**. The created virtual COM port would be found in **Ports (COM & LPT)** group. In the example, COM3 is used as the virtual COM port.



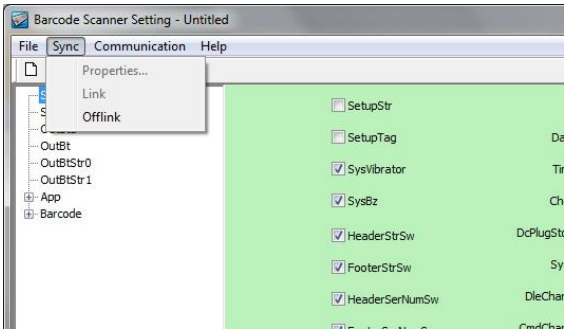

**1-4.** Invoke the utility program located in Product CD.



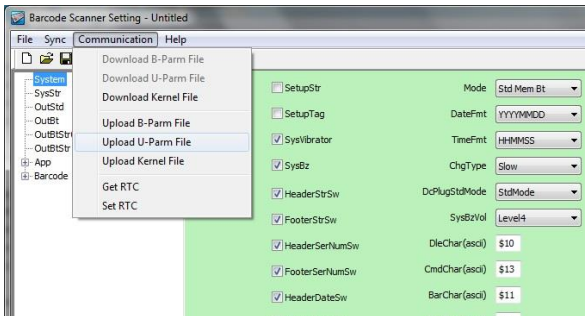
**1-5.** Select **Sync**> **Property**. In ComPort pop-up dialogue box, configure ComPort properly according to the virtual COM port created in **Step 3** and leave Baud rate with its default. In the example, configure it with COM4.



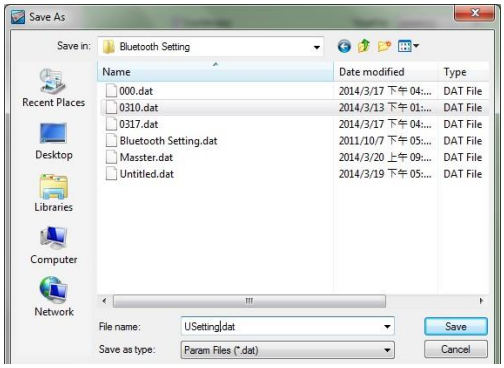
**1-6.** Select **Sync**> **Link** to link the scanner with the utility program. Once the link is successfully established, Link/Property options in Sync menu will be greyed out and the status bar will show associated information.



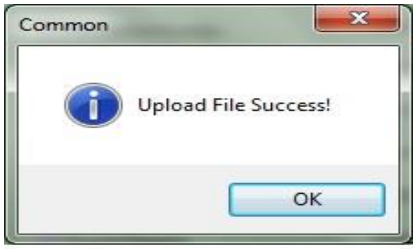

**1-7.** Before configuring your scanner, you need to upload the scanner status first to ensure the current setting will not be overwritten. In doing so, Select **Communication**> **Upload U-Parm File**.




**1-8.** As a **Save as** dialogue box pops up, specify the file name and click **Save** button.

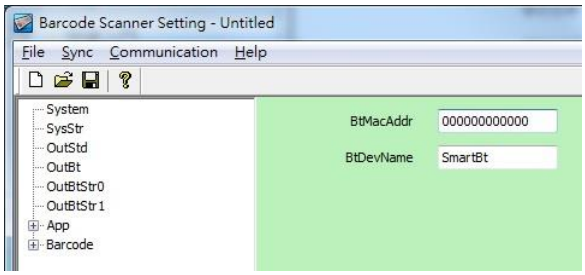


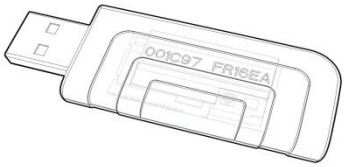

**1-9.** After the upload process is done, a message box will appear to indicate whether the operation is done successfully.



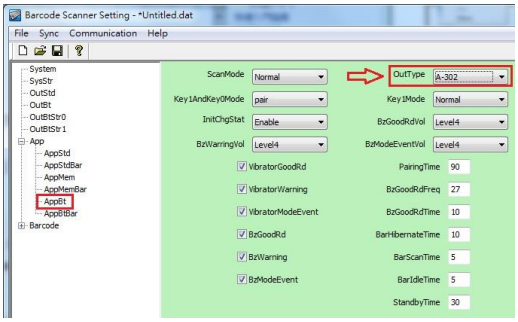
# Establish a Bluetooth Connection

**1-10.** Click on **OutBtStr1** item of the tree view in the left panel. Afterwards, Configure **BtDevName** according to your reference, but associate **BtMacAddr** with MAC address information which is clearly marked on the side of Bluetooth dongle A303. In this example, the MAC address is **001C97FR16EA**.

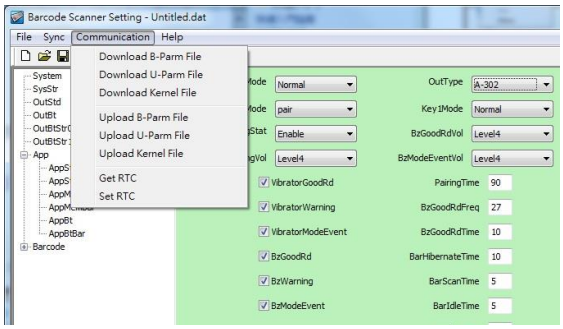


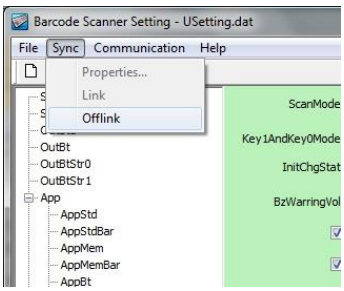

**1-11.** In the tree view, select **App**>**AppBt.** In the right panel, select **A302** in the **OutType** combo box. Click Save icon on the toolbar to save your settings.




**1-12.** Select **Communication**>**Download U-Parm file** to apply the customized settings to the scanner.




**1-13.** Select **Sync**> **Offlink** to complete the configuration.



## Step 2

Pair the scanner with third-party Bluetooth dongle.

**2-3.** Please have your scanner switch to Bluetooth mode. Choose one of two alternatives listed below to help you achieve the attempt.

### *Using Button Triggers*

- When the current mode indicator does not flash blue, please **hold Scan Button long enough to have LED light turn a solid color. Then, after a release of Scan Button, you can tell which operation mode it switches to by observing LED color.** Repeat the steps printed in bold if blue LED does not blink after releasing the Scan Button.

### *Scanning Programming Barcodes*

- Scan the below barcode.


**2-4.** Pair your scanner with third-party Bluetooth dongle by either of two options suggested below.

### *Using Button Triggers*

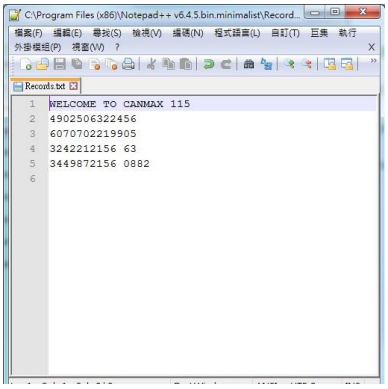
- After holding small trigger till blue LED starts blinking rapidly, press down Scan Button without releasing Small Trigger. Then releasing Scan button and Small trigger at the same time will initiate the pairing process.

### *Scanning Programming Barcodes*

- Scan the below barcode.

## Step 3

Launch the existing text editing application to receive barcode data.



# 6. General Configuration

This chapter will provide setup barcodes regarding the general settings, and elaborate how these configurations are going to take effect in terms of the scanner operation.

## 6-1. Host Interface

### 6-1-1. Restore the Setting

Scan the below barcode to restore the device back to the default settings, but to leave interface-related configurations unchanged.

**Default** ZADE

### 6-1-2. Restore the Symbology Setting

Scan the below barcode to restore the symbologies to the default settings.

**Barcode Default** ZDEF

### 6-1-3. Retrieve Firmware Information

Scan the below barcode to retrieve firmware information, including engine version, firmware version, and Bluetooth module version.

**Version** ZVER

### 6-1-4. Abort the Configuration

Scan the below barcode to terminate the current operation and exit the configuration mode.

**Abort** ZEXT

### 6-1-5. Update Firmware

This setup barcode allows you to attemp a firmware update via the utility program. After securing the interface into the scanner and the PC USB port, scan the below barcode to create a virtual COM port which avails the utility of the access of the device.

**ISP** ZISP

### 6-1-6. Enable/Disable Automatic Battery Charger

By default, the device will automatically initiate the charging process to ensure a sufficient battery level after connected with the interface cable. Scan the barcode to enable or disable automatic battery charger. If the automatic battery charger is disabled, scan the barcode to turn it on; Conversely, scan the barcode to turn off the automatic charger when the function is enabled.

**Charge On/Off** ZCHG

### 6-1-7. Bluetooth Pairing

Scan the barcode to initiate the Bluetooth pairing process.

**BtPairing** ZPAR

## 6-2. System Control

### 6-2-1. Available Operation Modes

Taking into account the diversity of the business activities, three operation modes are provided to improve efficiency at work. The list of setup barcodes below shows varied selections of mode combinations, including 2in1 and 3in1 functions, for you to choose from. Scan the appropriate barcode to determine availability of operation modes.

**Cable** A40C0

**Memory** A40C1

**Cable+Mem** A40C2

**Bluetooth** A40C3

Cable+BT A40C4

Mem+BT A40C5

Cable+Mem+BT A40C6

## 6-2-2. Set Date Format

Scan the appropriate barcode to specify the date format.

YYYYMMDD A42C0

MMDDYYYY A42C1

DDMMYYYY A42C2

YYMMDD A42C3

MMDDYY A42C4

DDMMYY A42C5

## 6-2-3. Set Time Format

Scan the appropriate barcode to specify the time format.

HHMMSS A42A0

HHMM A42A1

MMSS A42A2

## 6-2-4. Set Charge Rate

Scan the appropriate barcode to specify the charge rate.

Slow A4380

Quick A4381

## 6-2-5. Set the Workflow of Operation Modes Switch

This parameter specifies how the device switches among different operation modes. With **StdMode** setting, the operation mode will compulsorily switch to Cable mode when the device is connected with a cable. At the moment, the scanner is not able to switch to other modes unless the cable is unplugged from the scanner. Without the cable plugged in, the device will switch back to the previous operation mode, and Cable mode becomes unavailable. Conversely, if you wish the operation mode would remain the same or demand full availability of three operation modes, no matter whether the cable is plugged in or not, then scan **Disable** label to achieve the attempt.

Disable A4320

StdMode A4321

## 6-2-6. Enable/Disable Buzzer

The warning buzzer emits a sound when a warning occurs. Scan the appropriate barcode to disable or enable the buzzer.

**Disable** A4550

**Enable** A4551

## 6-2-7. Set the Warning Buzzer Volume

Scan the appropriate barcode to specify the volume of the warning buzzer. The higher level indicates the louder sound.

**Level1** A4580

**Level2** A4581

**Level3** A4582

**Level4** A4583

## 6-2-8. Enable/Disable Vibrator

Vibrator functions as the warning buzzer yet sends a warning signal by vibration. Scan the appropriate barcode to disable or enable the warning vibrator.

**Disable** A4540

**Enable** A4541

## 6-2-9. Enable/Disable Header

Headers refer to additional information, including serial number, date, time and so on, which precedes the decoded message while saved barcodes are transmitted in Memory mode. Scan the appropriate barcode to determine whether or not to send out the header information as part of transmitted data.

**Disable** A4600

**Enable** A4601

## 6-2-10. Enable/Disable Serial Number Info in the Header

Scan the appropriate barcode to determine whether or not to send out serial number information as part of header information.

**Disable** A4610

**Enable** A4611

## 6-2-11. Enable/Disable Date Info in the Header

Scan the appropriate barcode to determine whether or not to send out date information as part of header information.

**Disable** A4620

**Enable** A4621

## 6-2-12. Enable/Disable Time Info in the Header

Scan the appropriate barcode to determine whether or not to send out time information as part of header information.

**Disable** A4630

**Enable** A4631

## 6-2-13. Enable/Disable Record Count Info in the Header

Record count information refers to the total number of scanned barcodes. Read the appropriate barcode to determine whether or not to send out the record count as part of header information.

**Disable** A4640

**Enable** A4641

## 6-2-14. Enable/Disable Footer

Footers refer to additional information which is appended to the decoded message while saved barcodes are transmitted in Memory mode. Scan the appropriate barcode to determine whether or not to send out the footer information as part of transmitted data.

**Disable** A4700

**Enable** A4701

## 6-2-15. Enable/Disable Serial Number Info in the Footer

Scan the appropriate barcode to determine whether or not to send out serial number information as part of footer information.

**Disable** A4710

**Enable** A4711

## 6-2-16. Enable/Disable Date Info in the Footer

Scan the appropriate barcode to determine whether or not to send out date information as part of footer information.

**Disable** A4720

**Enable** A4721

## 6-2-17. Enable/Disable Time Info in the Footer

Scan the appropriate barcode to determine whether or not to send out time information as part of footer information.

**Disable** A4730

**Enable** A4731

## 6-2-18. Enable/Disable Record Count Info in the Footer

Record count information refers to the total number of scanned barcodes. Read the appropriate barcode to determine whether or not to send out the record count as part of footer information.

**Disable** A4740

**Enable** A4741

## 6-2-19. Set Date & Time

Scan the below barcode to set up date and time on the scanner. While associating the parameter with the preferred value, please pay attention to the time and date format you specify separately in **Section 6-2-2** and **Section 6-2-3** and then arrange related scan sequences in the correct format to work out the configuration.

**Set Date & Time** ZCLK

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **Set Date & Time** barcode to set time and date on the device.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan compound hexadecimal value barcodes representing the desired date and time. For instance, to configure date to be "2014/09/09"and time to "14:13:12", scan **1,4,0,9,0,9,1,4,1,3,1** and then **2** to assign the specified hexadecimal value "140909141312".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.



## 6-2-20. Set Date Separator

Date separator refers to the specified character which is used to format date data by dividing into different elements of years, months, and days. A customized date format with date separator will greatly increase readability.

**DateConChar** A56E2

**(Length: 1 digit)**

**Procedure**

(6) Scan **Enter** barcode.

(7) Scan **DateConChar** barcode to configure date separator.

(8) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ":" character to break down Date information, scan **3** first and then **A** to assign the specified hexadecimal value "3A".

(9) Scan **SET** barcode to complete the variable-binding operation.

(10) Scan **End** barcode to complete the configuration.

## 6-2-21. Set Time Separator

Time separator refers to the specified character which is used to format time data by dividing into different elements of hours, minutes, and seconds. A customized time format with time separator will greatly increase readability.

**TimeConChar** A57E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **TimeConChar** barcode to configure time separator.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ":" character to break down Time information, scan **3** first and then **A** to assign the specified hexadecimal value "3A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 6-2-22. Set Time-out Period for Configuration Mode

The timeout period mentioned here refers to the length of time the device is allowed to remain idle ever since **ENTER** barcode is scanned to initiate Configuration mode. Once the time-out session expires, the scanner will automatically exit Configuration mode. This parameter allows you to configure the timeout limit which works best for you.

**SetupTime** A5FE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **SetupTime** barcode to configure the length of the timeout session.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired decimal value in the range of 0 to 255. For instance, to set timeout period to 1 second, then scan **1** to assign the specified decimal value "1".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 6-2-23. Set Header Information

Header information refers to additional messages preceding to data output while the scanned barcodes are sent out in Memory mode. This special parameter allows you to customize your own custom header to add clarity of transmitted data.

Header A60E6

(Length: 12 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Header** barcode to configure the length of the timeout session.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 12 characters in length. For instance, to place the employee name "Mark" in the header section, scan **4, D, 6, 1, 7, 2, 6** followed by **B** to assign the specified hexadecimal value “4D61726B”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

### 6-2-24. Set Footer Information

Footer information refers to additional messages which are appended to data output while the scanned barcodes are sent out in Memory mode. This special parameter allows you to customize your own custom footer to add clarity of transmitted data.

**Footer** A70E6

**(Length: 12 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Footer** barcode to configure the length of the timeout session.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 12 characters in length. For instance, to place the employee name "Mark" in the footer section, scan **4, D, 6, 1, 7, 2, 6** followed by **B** to assign the specified hexadecimal value “4D61726B”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 6-3. Scanner Commands

To perform certain special tasks, you sometimes will use Command Prompt commands to communicate with the device instead of having your scanner read a sequence of setup barcodes listed in the manual. In the case like this, you possibly need to rely on escape characters, no matter predefined or customized, to notify the decoder of the additional interpretation on the text following prefixed escape characters. The below configurable parameters allow you to define your own escape characters while you work with a terminal program to send out command strings to the scanner.

## 6-3-1. Set <DLE> Escape Character

The parameter serves to avoid the reserved characters from being interpreted using their originally defined meanings. The special characters thus will be treated as the normal ones once preceded with DLE escape character. Associate the user-defined parameter with the value of the reserved character you intend to escape to complete the configuration.

**DleChar** A51E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **DleChar** barcode to configure <DLE> escape character.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to demand a special interpretation for the string following <DLE> escape character "#", scan **2** first and then **3** to assign the specified hexadecimal value "23".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 6-3-2. Set <CMD> Escape Character

In most cases, this parameter is used to specify the position where the command options are retrieved to execute the modified operations for the specified command line, especially when you are working with a terminal program to send commands to the scanner. Once <CMD> escape character is well defined, please properly append the desired and valid command options to the escape character to achieve the attempt.

**CmdChar** A52E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **CmdChar** barcode to configure <CMD> escape character.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to demand a special interpretation for the string following <CMD> escape character "~", scan **7** first and then **E** to assign the specified hexadecimal value "7E".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 6-3-3. Set <BAR> Escape Character

<BAR> escape character is used to specify the position where the barcode is. According to the configuration, the decoder will treat the characters following the parameter value as barcode data to further perform relevant process.

**BarChar** A53E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarChar** barcode to configure <BAR> escape character.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to demand a special interpretation for the string following <BAR> escape character "&", scan **2** first and then **6** to assign the specified hexadecimal value "26".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 6-3-4. Set <STX> Escape Character

In general, a valid command string is required to begin with a start delimiter which precedes the command code to denote the start of a command string. By associating this user-defined parameter with the desired control codes, you are able to create your own custom start digit.

**StxChar** A55E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StxChar** barcode to configure <STX> escape character.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to demand a special interpretation for the string following <STX> escape character "%", scan **2** first and then **5** to assign the specified hexadecimal value "25".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 6-3-5. Set <ETX> Escape Character

In general, a valid command string is required to end with a stop delimiter which is appended to the command code to denote the end of a command string. By associating this user-defined parameter with the desired control codes, you are able to create your own custom end digit.

**EtxChar** A54E2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **EtxChar** barcode to configure <ETX> escape character.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to demand a special interpretation for the string following <ETX> escape character "^", scan **5** first and then **E** to assign the specified hexadecimal value "5E".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

# 7. Setting up your Operation Modes

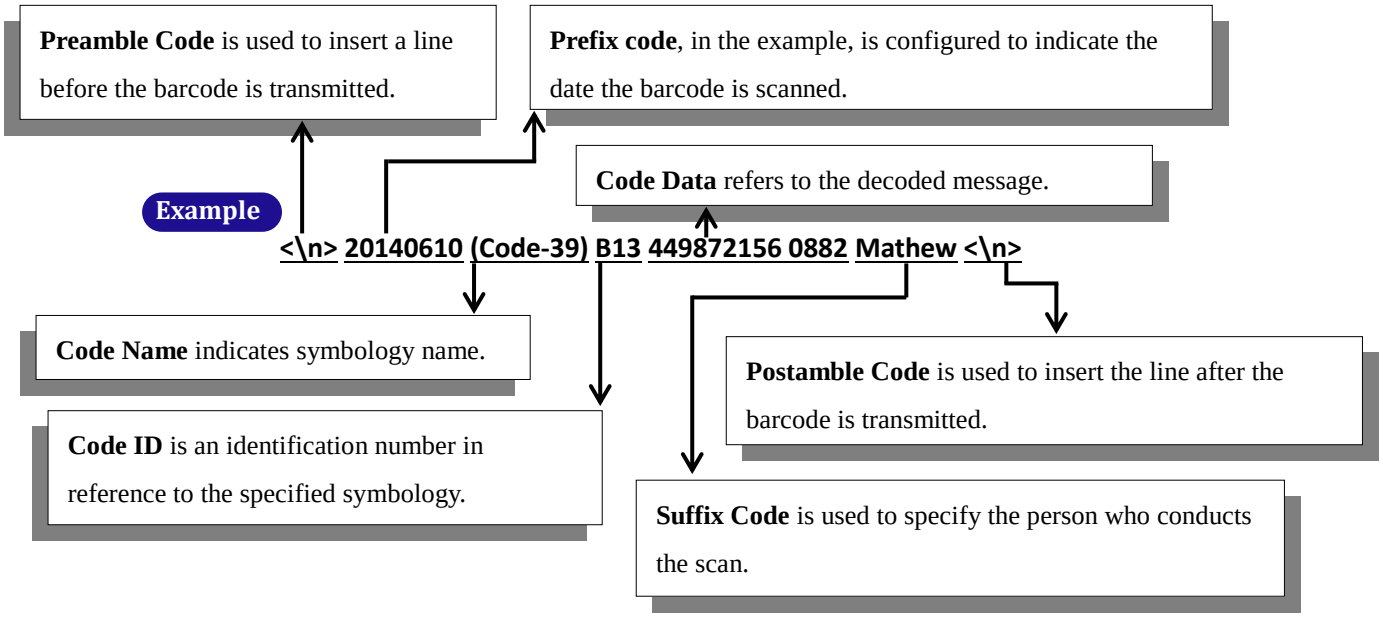
In view of individuality of each operation mode, this chapter presents the relevant parameters which you can configure depending on your usage habits in different modes, in the hope that you always get comfortable operating MK-600W3.

Besides, the features used to edit output data are also included in this chapter. Before being exposed to the great details about their configurations, you are suggested to first get a glimpse of the fundamental constituents of a complete output string. Knowing its structure assuredly helps you to structure the scanned data in a highly readable form.

## 7-1. Output String Structure

On the whole, a complete output string is composed of a couple of data fields, starting with **Preamble code** followed in order by **Prefix Code, Code Name, Code Data,** and **Suffix Code**, ending with **Postamble Code**. Except for **Code Data** filed as an indispensable and non-configurable part of output data, the rest are optional transmit elements which you can define on your terms. The relevant configuration on the output formatting parameters will be elaborated in order throughout this chapter.

Take an output string, **<\n>20140610(Code-39)B13449872156 0882StaffName<\n>**, as an example. In general, it can be broken down into several data fields as the below illustration shows:




| Output String Structure | | | | | | |
|---|---|---|---|---|---|---|
| Preamble Code | Prefix Code | Code Name | Code ID | Code Data | Suffix Code | Postamble Code |
| <\n> | 20140610 | (Code-39) | B13 | 449872156 0882 | Mathew | <\n> |

## 7-2. Cable Mode

Please be advised the following parameters in this section simply work for the associated operations in Cable mode. Make sure that you appropriately conduct the operations using Cable mode.

## 7-2-1. Output Interface Options

In terms of output interface options, it is more about technical configuration regarding how you want barcode data to be transmitted between devices in Cable mode before scanned barcode is further processed. Properly configure your scanner according to the realistic situation will lead to satisfactory data transmission performance.

### 7-2-1-1. Set Data Transfer Rate for SPP

Data transfer rate, measured in bits per second, refers to speed of digital data travelled among devices. Scan the appropriate barcode to specify data transfer rate for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**7 Bits** AA020

**8 Bits** AA021

### 7-2-1-2. Set Length of Stop Bit for SPP

Stop bit follows after the end of data in transit as to signal the end of transmitted data. Scan the appropriate barcode to specify the length of stop bit for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**1 Bit** AA030

**2 Bits** AA031

### 7-2-1-3. Set Parity Check for SPP

Parity checking employs parity bits to detect whether an error occurs or not during data transmission. Out of six variants scan the appropriate barcode to specify the type of parity bits for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**None** AA0D0

**Even** AA0D1

**Odd** AA0D2

**Space** AA0D3

**Mark** AA0D4

### 7-2-1-4. Set Communication Protocol for SPP

Scan the appropriate barcode to specify the communication protocol for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**None** AA1C0

**0x06/0x15** AA1C1

**Ack/Nak** AA1C2

### 7-2-1-5. Enable/Disable <STX> and <ETX> Escape Characters for SPP

Scan the appropriate barcode to enable or disable <STX> and <ETX> escape characters for SPP if the associated operations are performed using RS-232 or USB COM interfaces. Regarding the more detailed configuration on escape characters, please refer to **Scanner Commands** which is located in the section 6-3 of Chapter 6.

None AA1A0

STX/ETX AA1A1

### 7-2-1-6. Enable/Disable <BAR> and <CMD> Escape Characters for SPP

Scan the appropriate barcode to enable or disable <BAR> and <CMD> escape characters for SPP if the associated operations are performed using RS-232 or USB COM interfaces. Regarding the more detailed configuration on escape characters, please refer to **Scanner Commands** which is located in the section 6-3 of Chapter 6.

Disable AA160

Enable AA161

### 7-2-1-7. Enable/Disable Command Mode for SPP

Scan the appropriate barcode to enable or disable Command mode for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

Disable AA170

Enable AA171

### 7-2-1-8. Set Baud Rate for SPP

Baud Rate refers to the amount of data per second can be transmitted. Scan the appropriate barcode to specify the desired baud rate of data transmission for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**300Bps** AA2C0

**600Bps** AA2C1

**1200Bps** AA2C2

**2400Bps** AA2C3

**4800Bps** AA2C4

**9600Bps** AA2C5

**19200Bps** AA2C6

**38400Bps** AA2C7

**57600Bps** AA2C8

**115200Bps** AA2C9

**230400Bps** AA2CA

460800Bps AA2CB

512000Bps AA2CC

### 7-2-1-9. Set Transfer Count for Time Delay for SPP

This parameter allows you to specify the number of digits which has to be transmitted to initiate a time delay referring to an intentional deferment of data transmission. Please follow the below steps to set the transfer count for time delay for SPP if the associated operations are performed using the RS-232 or USB COM interfaces.

StdSppTxCharGapCnt AA9E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxCharGapCnt** barcode to configure the transfer count for time delay for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to initiate time delay after every five digits are transmitted, then scan **5** to assign the specified decimal value “5”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-10. Set Time Delay for a Digit for SPP

This parameter refers to the amount of elapsed time to delay transmitting a digit. Please follow the below steps to set time-delay variable for a digit for SPP if the associated operations are performed using the RS-232 or USB COM interfaces.

**StdSppTxCharGapTime** AAAE0

**(Length: 1 digit / Range: 0-255/ Unit: 1ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxCharGapTime** barcode to configure delay time for a digit for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2, 0,** and then **0** to assign the specified decimal value "200".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-11. Set Time Delay for a Record for SPP

This parameter refers to the amount of elapsed time to delay transmitting a record. Please follow the below steps to set time-delay variable for a record for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**StdSppTxGapTime** AABE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **StdSppTxGapTime** barcode to configure delay time for a record for SPP.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a record for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-1-12. Set Time Delay for a Specified Digit for SPP

This parameter refers to the amount of elapsed time to delay transmitting a specified character. Please follow the below steps to set time-delay variable for a specified digit for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**StdSppTxExtTime** AACE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxExtTime** barcode to configure delay time for a specified digit for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a specified digit for 1 second, scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-13. Set Timeout for SPP

Timeout is initiated when the device keeps waiting for an event to occur and thus remains idle for a period of time during the data transmission. This parameter allows you to specify the amount of time to elapse before timeout is officially triggered. Please follow the below steps to configure the timeout period for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**StdSppTxOtTime** AADE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxOtTime** barcode to configure timeout parameter for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to set the timeout period to 1 second, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-14. Set Retransmission Count for SPP

To avoid data transmission loss, messages sometimes have to be resent due to a failure to receive ACK signal. This parameter allows you to configure the number of attempting retransmission for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**StdSppTxAckCnt** AAEE0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxAckCnt** barcode to configure timeout parameter for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set retransmission count to 1, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-15. Set ACK Timeout for SPP

ACK timeout refers to the allotted time to elapse for the receipt of ACK signal before timeout is initiated. This parameter allows you to specify the amount of time allocated for ACK timeout for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**StdSppTxAckTime** AAFE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdSppTxAckTime** barcode to configure ACK timeout for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to set ACK timeout to be 1, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-16. Set Caps Lock Setting for HID

This parameter provides the alternative to emulate Caps Lock which is a lock key to change the letter case of the typed alphabets. Read either **Caps Lock On** or **Caps Lock off** label to initiate the inversion of the letter case. However, in this case, the status of Caps Lock on your physical keyboard should be also taken into account. As to the mutual interaction between Caps lock key on the keyboard and the capital settings, please refer to the below chart to achieve the attempt. Alternatively, scan **Alt+Keyoad** label to determine the letter case of typed alphabets by keystroke combinations of Alt + ASCII code , regardless of the status of Caps Lock key. **Auto** label is to transmit the barcode data without inverting its case.

**Example**

**ABCdef** ABCdef

| Cap Locks Status / Scanner Options | Caps Lock On | Caps Lock Off |
|---|---|---|
| **Caps Lock On** | ABCdef | abcDEF |
| **Caps Lock Off** | abcDEF | ABCdef |
| **Alt+Keypad** | ABCdef | ABCdef |

**Auto** AB0A0

**Caps Lock Off** AB0A1

**Caps Lock On** AB0A2

**Alt+Keypad** AB0A3

## 7-2-1-17. Enable/Disable Num Lock for HID

Scan the appropriate barcode to enable or disable Num Lock if the associated operations are performed using USB HID interface.

**Disable** AB060

**Enable** AB061

## 7-2-1-18. Enable/Disable Caps Lock Emulation

Scan the appropriate barcode to determine whether or not to use Shift keystroke to emulate Caps lock key if the associated operations are performed using USB HID interface.

Disable AB070

Enable AB071

## 7-2-1-19. Set IMEs for HID

IME is a program which allows users to input different sets of characters derived from different languages. Scan the appropriate barcode to specify active Input Method Editors, if the associated operations are performed using USB HID interface.

EN AB1C0

UK AB1C1

JP AB1C2

FR AB1C3

GR AB1C4

IT AB1C5

SP AB1C6

PO AB1C7

SK AB1C8

KO AB1C9

TR AB1CA

## 7-2-1-20. Set Character Coding Method for HID

According to the encoding method of barcodes in hand, scan the appropriate label to specify the associated character coding method.

US AB2C0

Big5 AB2C1

Gb3121 AB2C2

Sjis AB2C3

## 7-2-1-21. Set Operating Syetem for HID

To set under anykind of operating system, it will be displayed by scanned barcode.

Windows AB2A0

Mac AB2A1

## 7-2-1-22. Set Transfer Count for Time Delay for HID

This parameter allows you to specify the number of digits which has to be transmitted to initiate a time delay referring to an intentional deferment of data transmission. Please follow the below steps to set the transfer count for time delay if the associated operations are performed using USB HID interface.

**StdHidTxCharGapCnt** AB9E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdHidTxCharGapCnt** barcode to configure the transfer count for time delay for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to initiate a timeout after 10 digits are transmitted, scan **1** first and then **0** to assign the specified decimal value "10".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-23. Set Time Delay for a Digit for HID

This parameter refers to the amount of elapsed time to delay transmitting a digit. Please follow the below steps to set time delay for transmitting a digit if the associated operations are performed using USB HID interface.

**StdHidTxCharGapTime** ABAE0

**(Length: 1 digit / Range: 0-255/ Unit: 1ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdHidTxCharGapTime** barcode to configure delay time for a digit for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2, 0** and then **0** to assign the specified decimal value "200".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-24. Set Time Delay for a Record for HID

This parameter refers to the amount of elapsed time to delay transmitting a record. Please follow the below steps to set time delay for transmitting a record if the associated operations are performed using USB HID interface.

**StdHidTxGapTime** ABBE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdHidTxGap**Time barcode to configure delay time for a record for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-25. Set Time Delay for a Specified Digit for HID

This parameter refers to the amount of elapsed time to delay transmitting a specified character. Please follow the below steps to set time delay for transmitting a specified digit if the associated operations are performed using USB HID interfaces.

**StdHidTxExtTime** ABCE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdHidTxExtTime** barcode to configure delay time for a specified digit for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 1 second, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-1-26. Set Timeout for HID

Timeout is initiated when the device keeps waiting for an event to occur and thus remains idle for a period of time during the data transmission. This parameter allows you to specify the amount of time to elapse before timeout is officially triggered. Please follow the below steps to configure the timeout period if the associated operations are performed using USB HID interface.

**StdHidTxOtTime** ABDE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StdHidTxOtTime** barcode to configure timeout parameter for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set the timeout period to be 3 seconds, then scan **3** to assign the specified decimal value "3".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-2. Scanner Options

A selection of scanner options, from setting button functions to adjusting the buzzer volume and vibrator, is offered to personalize the device to suit your usage habits.

### 7-2-2-1. Set Scan Mode

Scan Mode refers to how the scanner reacts to the scanned barcode. If **Good Read On** is activated, LED light stays on when Scan button is pressed down, and turns off when Scan button is released or a barcode is scanned. However, with **Good Read Off** settings, LED will remain lit for a specified period of time after Scan button is pressed. In this case, LED will turn off only when the barcode is successfully decoded or the timeout period expires. Please scan the appropriate label to determine your preferred scan mode.

GoodReadOn B2080

GoodReadOff B2081

### 7-2-2-2. Set Output Interface

Please scan the appropriate barcode to specify the output interface.

USBHid B21D1

USBSpp B21D2

### 7-2-2-3. Set Small Trigger Functionality

Small Trigger is designed to perform various supplementary operations, from initiating battery charge to switching to data transmission mode, according to the length of time the button has been pressed. To facilitate the associated operations with Small Trigger, this parameter is available to specify the degree of Small Trigger's functionality. Scan **Disable** label to specify Small Trigger will not provide any additional function. On the other hand, when **Mem Tx** is enabled, the device is able to switch to data transmission mode by keeping holding Small Trigger long enough to trigger off a solid green LED light. By default, Small Trigger is set for maximum functionality without limit.

**Disable** B2290

**Mem Tx** B2292

**Normal** B2293

### 7-2-2-4. Set Composite Triggers Functionality

Some supplementary functions are necessarily executed by using composite triggers though Scan Button primarily serves to scan barcodes and Small Trigger to initiate data transmission. In Cable mode, battery charge is an extra function which can be initiated by pressing Small Trigger and Scan Button in a specified sequence described below: while holding Small Trigger till the green LED light starts flashing rapidly, press down Scan Button at the same time and then release both buttons. Scan the appropriate label to enable or disable functionality of battery charge.

**Disable** B2280

**ChgSw** B2281

## 7-2-2-5. Set Good Read Buzzer Volume

Scan the appropriate barcode to specify the volume of Good Read Buzzer when a barcode is decoded successfully. The higher level indicates the louder sound.

**Level1** B2480

**Level2** B2481

**Level3** B2482

**Level4** B2483

## 7-2-2-6. Set Warning Buzzer Volume

Scan the appropriate barcode to specify the volume of Warning Buzzer when an error occurs. The higher level indicates the louder sound.

**Level1** B2490

**Level2** B2491

**Level3** B2492

**Level4** B2493

## 7-2-2-7. Set Mode Event Buzzer Volume

Scan the appropriate barcode to specify the volume of Mode Event Buzzer when certain operations, such as switching operation modes, entering data transmission mode, and battery charge, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. The higher level indicates the louder sound.

**Level1** B24A0

**Level2** B24A1

**Level3** B24A2

**Level4** B24A3

## 7-2-2-8. Enabl/Disable Battery Charge

Scan the appropriate barcode to determine whether to initiate battery charge whenever the device is well connected to host PC using an interface cable and switched to Cable mode.

**Disable** B2380

**Enable** B2381

## 7-2-2-9. Enable/Disable Good Read Vibrator

Scan the appropriate barcode to enable or disable Good Read Vibrator when a barcode is successfully decoded.

Disable B2500

Enable B2501

### 7-2-2-10. Enable/Disable Warning Vibrator

Scan the appropriate barcode to enable or disable Warning Vibrator when an error occurs.

Disable B2510

Enable B2511

### 7-2-2-11. Enable/Disable Mode Event Vibrator

Mode Event Vibrator is used to give a vibration signal whenever certain operations, such as switching operation modes, entering data transmission mode, and battery charge, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Vibrator.

Disable B2520

Enable B2521

### 7-2-2-12. Enable/Disable Good Read Buzzer

Scan the appropriate barcode to enable or disable Good Read Buzzer when a barcode is successfully decoded.

Disable B2600

Enable B2601

## 7-2-2-13. Enable/Disable Warning Buzzer

Scan the appropriate barcode to enable or disable Warning Buzzer when an error occurs.

**Disable** B2610

**Enable** B2611

## 7-2-2-14. Enable/Disable Mode Event Buzzer

Mode Event Buzzer is used to give an acoustic signal whenever certain operations, such as switching operation modes, entering data transmission mode, and battery charge, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Buzzer.

**Disable** B2620

**Enable** B2621

## 7-2-2-15. Set Good Read Buzzer Frequency

Please follow the below steps to specify Good Read Buzzer frequency when a barcode is decoded successfully.

**BzGoodRdFreq** B35E0

**(Length: 1 digit / Range: 1-50/ Unit: 100 Hz)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BzGoodRdFreq** barcode to configure Good Read buzzer frequency.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer frequency to 10000 Hz, scan **1, 0** and then **0** to assign the specified decimal value "100".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-2-16. Set Good Read Buzzer Duration

Please follow the below steps to specify Good Read Buzzer duration when a barcode is decoded successfully.

**BzGoodRdTime** B36E0

**(Length: 1 digit / Range: 1-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BzGoodRdTime** barcode to configure Good Read buzzer duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer duration for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-2-17. Set Hibernation Duration

While remaining inactive for a period of time, the device will be forced to enter power-saving mode for considerations to lower power consumption. As a result, this parameter is available to specify the amount of time allocated for the device to stay in hibernation. Once the specified time period expires, the scanner will be shut down immediately. Please follow the below steps to configure hibernation duration.

**BarHibernateTime** B39E0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarHibernateTime** barcode to configure hibernation duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set hibernation duration to be 10 seconds, scan **1** first and then **0** to assign the specified decimal value "10".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-2-18. Set Activation Duration

In general, after Scan Button is pressed down, LED light will emit a stream of light for a scan attempt. This parameter is thus used to specify activation duration which indicates the amount of time LED light will stays on after Scan Button is held.

**BarScanTime** B3AE0

**(Length: 1 digit / Range: 5-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BarScanTime** barcode to configure activation duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set activation duration to be 2 seconds, then scan **2** to assign the specified decimal value "2".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-2-2-19. Set Idle Duration

The device will switch to power-saving mode after remaining idle for a while. This parameter is thus used to specify the length of time allocated for the scanner to elapse before power-saving mode is initiated.

**BarIdleTime** B3BE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BarIdleTime** barcode to configure idle duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set idle duration to be 3 seconds, the scan **3** to assign the specified decimal value "3".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-2-20. Set Standby Duration

After lengthy idleness, the device will first be put into standby state in which the machine is still able to react to the emergent request yet running in lower power consumption. This parameter refers to the amount of time allocated for the device to stay in standby before being totally shut down.

**StandbyTime** B3FE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StandbyTime** barcode to configure idle duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Standby duration to be 15 seconds, scan **1** first and then **5** to assign the specified decimal value "15".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-2-3. Output Editing Options

The parameters fallen into this category focus on functionality relevant to output editing in Cable mode. With these available editing settings, you can arrange plentiful scanned barcode in your own style, and accordingly results in a subtle output layout which will benefit yourself from locating barcode data more efficiently.

### 7-2-3-1. Enable/Disable Preamble Code

Preamble Code refers to a sequence of characters which precedes both the Prefix Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Preamble Code.

Disable B4000

Enable B4001

### 7-2-3-2. Enable/Disable Postamble Code

Postamble Code refers to a sequence of characters which appends to both barcode data and Suffix Code during data transmission. Scan the appropriate barcode to enable or disable Postamble Code.

Disable B4010

Enable B4011

### 7-2-3-3. Enable/Disable Prefix Code

Prefix Code is a sequence of characters interposed between Preamble Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Prefix Code.

**Disable** B4020

**Enable** B4021

### 7-2-3-4. Enable/Disable Suffix Code

Suffix Code is a sequence of characters interposed between barcode data and Postamble Code during data transmission. Scan the appropriate barcode to enable or disable Suffix Code.

**Disable** B4030

**Enable** B4031

### 7-2-3-5. Enable/Disable Code ID

Code ID, a user-defined identification characters for symbologies, normally precedes Barcode Data field during data transmission when the associated parameter is enabled. Scan the appropriate barcode to enable or disable Code ID.

**Disable** B4040

**Enable** B4041

## 7-2-3-6. Set Position of Code ID

Scan the appropriate barcode to specify the position of Code ID you prefer to display as a part of transmitted data. Scan **Before** label to prefix Code ID to barcode data whereas read **After** label to append Code ID to barcode data.

Before B4050

After B4051

## 7-2-3-7. Enable/Disable Barcode Length Info

Scan the appropriate barcode to determine whether or not to send out length information of scanned barcode as part of transmitted data. If the feature is **Enabled**, length info will be prefixed to decoded barcode.

Disable B4060

Enable B4061

## 7-2-3-8. Enable/Disable Symbology Name

Scan the appropriate barcode to determine whether or not to transmit symbology name information which is normally prefixed to decoded barcode as part of transmitted data.

Disable B4070

Enable B4071

### 7-2-3-9. Enable/Disable Control Code Info

Scan the appropriate barcode to determine whether or not to transmit control code info along with the decoded message if the scanned barcode contains the special ASCII code.

**Disable** B4100

**Enable** B4101

### 7-2-3-10. Enable/Disable Delimiter

Scan the appropriate barcode to determine whether or not to interpose the delimiter parameter between the decoded message and timestamps.

**Disable** B4110

**Enable** B4111

### 7-2-3-11. Set Timestamps Positioning

Scan the appropriate barcode to specify the position of timestamps, to the left or the right of decoded message, when output data contains timestamp information. Scan **Before** label to position timestamps on the left side of the barcode, and read **After** label to append timestamps to the barcode**.**

**Before** B4120

**After** B4121

## 7-2-3-12. Enable/Disable Date Information

Scan the appropriate barcode to determine whether or not to transmit date information along with the decoded message.

**Disable** B4130

**Enable** B4131

## 7-2-3-13. Enable/Disable Time Information

Scan the appropriate barcode to determine whether or not to transmit time information along with the decoded message.

**Disable** B4140

**Enable** B4141

## 7-2-3-14. Set Type of Case Conversion

This parameter allows you to initiate letter case conversion which treats the decoded message as a whole and converts it between upper case and lower case according to the setting. Scan the appropriate the label to specify the type of case conversion.

**None** B4380

**Inverse** B4381

**Lower** B4382

**Upper** B4383

## 7-2-3-15. Set Delimiter Between Time/Date Stamps and Barcode Data

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between timestamps and the decoded message to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-2-3-10** to enable the relevant delimiter parameter as well.

**DelimiterChar** B4BE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **DelimiterChar** barcode to configure the delimiter.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-3-16. Set Delimiter Between Date and Time Stamps

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between time and date stamps to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-2-3-12** and **Section 7-2-3-13** to enable time and date stamps as well.

**DateTimeSpare** B4AE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **DateTimeSpareChar** barcode to configure the delimiter.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-3-17. Set Preamble Code

In the process of transmitting data, Preamble Code normally precedes both Prefix Code and barcode data as a user-defined string to format the output data. Although Preamble Code and Prefix Code work similarly to structure the transmitted message, functionality they individually intend to perform differs. Basically, Preamble Code is designed to arrange a layout using line terminators, such as carriage return, line fee, line separator, paragraph separator and so on. Therefore, it is suggested to associate this configurable parameter with equivalent ASCII code value for line terminators whenever you possibly use preamble code in the hope of organizing the transmitted message. Please follow the below steps to configure Preamble code.

**PreambleChar** B4CE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **PreambleChar** barcode to configure Preamble Code.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set preamble code to be <CR><LF>, scan **0, D, 0,** and then **A** to assign the specified hexadecimal value "0D0A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-2-3-18. Set Postamble Code

In the process of transmitting data, Postamble Code is appended to both the suffix code and barcode data as a user-defined string to format the output data. However, Postamble Code not simply works like Suffix Code to better format the transmitted messages, but, to precisely describe it, expects to emulate line terminators to break transmission line. Consequently, it is strongly suggested to associate this configurable parameter with equivalent ASCII code value for line terminators. Please follow the below steps to configure Postamble Code.

**PostambleChar** B4EE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **PostambleChar** barcode to configure Postamble Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set postamble code to be <CR><LF>, scan **0, D, 0,** and then **A** to assign the specified hexadecimal value "0D0A".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-2-3-19. Set Prefix Code

In the process of transmitting data, Prefix Code is normally interposed between Preamble Code and barcode data as a user-defined string to format the output data. It seems that Preamble Code and Prefix Code both provide exactly the same formatting function, but in fact they work slight differently in terms of their functionality. Unlike Preamble Code which intends to function as line terminators to appropriately break line in data transit, Prefix Code is more inclined to clarify the difference among lines by binding with any type of characters which is only identifiable for you to achieve the attempt. Please follow the below steps to configure Prefix Code.

**PrefixChar** B50E5

**(Length: 8 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **PrefixChar** barcode to configure Prefix Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 8 characters in length. For instance, to set prefix code to be “ABCD”, scan **4, 1, 4, 2, 4, 3, 4,** and then **4** to assign the specified hexadecimal value "41424344".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-2-3-20. Set Suffix Code

In the process of transmitting data, Suffix Code is normally interposed between barcode data and Postamble Code as a user-defined string to format the output data. By binding this configurable parameter with parameter value which is identifiable for you to achieve the attempt, Suffix Code is meant to identify the difference among lines, whereas functionality of Postamble Code is to arrange the data format by breaking the transmission line. Please follow the below steps to configure Suffix Code.

**SuffixChar** B58E5

**(Length: 8 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **SuffixChar** barcode to configure Suffix Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 8 characters in length. For instance, to set suffix code to be “EFGH”, scan **4, 5, 4, 6, 4, 7, 4,** and then **8** to assign the specified hexadecimal value "45464748".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.



## 7-3. Memory Mode

Please be advised the following parameters in this section simply works for the associated operations in Memory mode. Make sure that you appropriately conduct the operations using Memory mode.

### 7-3-1. Scanner Options

A selection of scanner options, from setting button functions to adjusting the buzzer volume and vibrator, is offered to personalize the device to suit your usage habits.

#### 7-3-1-1 Set Scan Mode

Scan Mode refers to how the scanner reacts to the scanned barcode. If **Good Read On** is activated, LED light will stay on when Scan button is pressed down, and turn off when Scan button is released or a barcode is decoded. However, with **Good Read Off** settings, LED will remain lit for a specified period of time after Scan button is pressed. In this case, LED will turn off only when the barcode is successfully decoded or the timeout period expires. Please scan the appropriate label to determine your preferred scan mode.

GoodReadOn B8080

GoodReadOff B8081

#### 7-3-1-2 Set Output Interface

Please scan the appropriate barcode to specify the output interface.

AppStd B81D0

USBHid B81D1

USB COM B81D2

**Mass Storage** B81D4

### 7-3-1-3 Set Small Trigger Functionality

Small Trigger is designed to perform various supplementary operations, from deleting single scanned data charge to switching to data transmission mode, according to the length of time the button has been pressed. To facilitate the associated operations with Small Trigger, this parameter is available to specify the degree of Small Trigger's functionality. Scan **Disable** label to specify Small Trigger will not provide any additional function. On the other hand, when **Mem Tx** is enabled, the device is able to switch to data transmission mode by keeping holding Small Trigger long enough to trigger off a solid orange LED light. By default, Small Trigger is set for maximum functionality without limit.

**Disable** B8290

**Del** B8291

**Mem Tx** B8292

**Normal** B8293

### 7-3-1-4 Set Composite Triggers Functionality

Some supplementary functions are necessarily executed by using composite triggers though Scan Button primarily serves to scan barcodes, and Small Trigger to initiate data transmission. In Memory mode, all the scanned barcode data will be deleted by pressing small trigger and Scan button in a specified sequence described below: while holding the smaller till the orange LED light starts flashing rapidly, press down Scan button at the same time and then release both buttons. Scan the appropriate label to enable or disable functionality of file deletion.

**Disable** B8280

**DelAll** B8281

### 7-3-1-5 Enable/Disable Battery Charge

Scan the appropriate barcode to determine whether to initiate battery charge whenever the device is well connected to host PC using an interface cable and switched to Memory mode.

**Disable** B8380

**Enable** B8381

### 7-3-1-6 Set Good Read Buzzer Volume

Scan the appropriate barcode to specify the volume of Good Read Buzzer when a barcode is decoded successfully. The higher level indicates the louder sound.

**Level1** B8480

**Level2** B8481

Level3 B8482

Level4 B8483

### 7-3-1-7 Set Warning Buzzer Volume

Scan the appropriate barcode to specify the volume of Warning Buzzer when an error occurs. The higher level indicates the louder sound.

Level1 B8490

Level2 B8491

Level3 B8492

Level4 B8493

### 7-3-1-8 Set Mode Event Buzzer Volume

Scan the appropriate barcode to specify the volume of Mode Event Buzzer when certain operations, such as switching operation modes, entering data transmission mode, and deleting all saved barcodes, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. The higher level indicates the louder sound.

Level1 B84A0

Level2 B84A1

Level3 B84A2

Level4 B84A3

### 7-3-1-9 Enable/Disable Good Read Vibrator

Scan the appropriate barcode to enable or disable Good Read Vibrator when a barcode is successfully decoded.

Disable B8500

Enable B8501

### 7-3-1-10 Enable/Disable Warning Vibrator

Scan the appropriate barcode to enable or disable Warning Vibrator when an error occurs.

Disable B8510

Enable B8511

### 7-3-1-11 Enable/Disable Mode Event Vibrator

Mode Event Vibrator is used to give a vibration signal whenever certain operations, such as switching operation modes, entering data transmission mode, and deleting all saved barcodes, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Vibrator.

Disable B8520

Enable B8521



### 7-3-1-12 Enable/Disable Good Read Buzzer

Scan the appropriate barcode to enable or disable Good Read Buzzer when a barcode is successfully decoded.

**Disable** B8600

**Enable** B8601

### 7-3-1-13 Enable/Disable Warning Buzzer

Scan the appropriate barcode to enable or disable Warning Buzzer when an error occurs.

**Disable** B8610

**Enable** B8611

### 7-3-1-14 Enable/Disable Mode Buzzer

Mode Event Buzzer is used to give an acoustic signal whenever certain operations, such as switching operation modes, entering data transmission mode, and deleting all saved barcodes, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Buzzer.

**Disable** B8620

**Enable** B8621

### 7-3-1-15 Set Data Transmission Unit

Scan the appropriate barcode to specify data transmission unit which will determine how the scanned barcodes will be sent out from the barcode reader in data transit. By default, barcode data will be transmitted in batches; alternatively, scan **1By1** label to transmit single barcode data at a time by giving Scan Button a press.

**Normal** B87C0

**1By1** B87C1

### 7-3-1-16 Deletion of Transmitted Data

Scan the appropriate barcode to determine whether to delete saved barcode data in memory after data transmission is completed.

**Disable** B87A0

**Enable** B87A1

### 7-3-1-17 Enable/Disable Header Info

Scan the appropriate barcode to determine whether or not to transmit header information as part of transmitted data in Memory mode.

**Disable** B8760

**Enable** B8761

## 7-3-1-18 Enable/Disable Footer Info

Scan the appropriate barcode to determine whether or not to transmit footer information as part of transmitted data in Memory mode.

**Disable** B8770

**Enable** B8771

## 7-3-1-19. Set Good Read Buzzer Frequency

Please follow the below steps to specify the buzzer frequency when a barcode is decoded successfully.

**BzGoodRdFreq** B95E0

**(Length: 1 digit / Range: 1-50/ Unit: 100Hz)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BzGoodRdFreq** barcode to configure Good Read buzzer frequency.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer frequency to 10000 Hz, scan **1, 0,** and then **0** to assign the specified decimal value "100".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-3-1-20. Set Good Read Buzzer Duration

Please follow the below steps to specify buzzer duration when a barcode is decoded successfully.

**BzGoodRdTime** B96E0

**(Length: 1 digit / Range: 1-255/ Unit: 10ms)**

Enter



End

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BzGoodRdTime** barcode to configure Good Read buzzer duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer duration for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-3-1-21. Set Hibernation Duration

While remaining inactive for a period of time, the device will be forced to enter power-saving mode for considerations to lower power consumption. As a result, this parameter is available to specify the amount of time allocated for the device to stay in hibernation. Once the specified time period expires, the scanner will be shut down immediately. Please follow the below steps to configure hibernation duration.

**BarHibernateTime** B99E0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BarHibernateTime** barcode to configure hibernation duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set hibernation duration to be 10 seconds, scan **1** first and then **0** to assign the specified decimal value "10".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-3-1-22. Set Activation Duration

In general, after Scan Button is pressed down, LED light will emit a stream of light for a scan attempt. This parameter is thus used to specify activation duration which indicates the amount of time LED light will stays on after Scan button is held.

**BarScanTime** B9AE0

**(Length: 1 digit / Range: 5-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarScanTime** barcode to configure activation duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcode representing the desired value in the range of 0 to 255. For instance, to set activation duration to be 2 seconds, then scan **2** to assign the specified decimal value "2".

the decimal value "2" by having the barcode scans sequenced as follows: **2**.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-3-1-23. Set Idle Duration

The device will switch to power-saving mode after remaining idle for a while. This parameter is thus used to specify the length of time allocated for the scanner to elapse before power-saving mode is initiated.

**BarIdleTime** B9BE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarIdleTime** barcode to configure idle duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set idle duration to be 3 seconds, then scan **3** to assign the specified decimal value "3".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-3-1-24. Set Standby Duration

After lengthy idleness, the device will first be put into standby state in which the machine is still able to react to the emergent request yet running in lower power consumption. This parameter refers to the amount of time allocated for the device to stay in standby before being totally shut down.

**StandbyTime** B9FE0

**(Length: 1 digit / Range: 30-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **StandbyTime** barcode to configure idle duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Standby duration to be 15 seconds, scan **1** first and then **5** to assign the specified decimal value "15".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-3-2. Output Editing Options

The parameters fallen into this category focus on functionality relevant to output editing in Memory mode. With these available editing settings, you can arrange plentiful scanned barcode in your own style, and accordingly results in a subtle output layout which will benefit yourself from locating barcode data more efficiently.

### 7-3-2-1. Enable/Disable Preamble Code

Preamble Code refers to a sequence of characters which precedes both Prefix Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Preamble Code.

Disable BA000

Enable BA001

### 7-3-2-2. Enable/Disable Postamble Code

Postamble Code refers to a sequence of characters which appends to both barcode data and Suffix Code during data transmission. Scan the appropriate barcode to enable or disable Postamble Code.

Disable BA010

Enable BA011

### 7-3-2-3. Enable/Disable Prefix Code

Prefix Code is a sequence of characters interposed between Preamble Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Prefix Code.

**Disable** BA020

**Enable** BA021

### 7-3-2-4. Enable/Disable Suffix Code

Suffix Code is a sequence of characters interposed between barcode data and Postamble Code during data transmission. Scan the appropriate barcode to enable or disable Suffix Code.

**Disable** BA030

**Enable** BA031

### 7-3-2-5. Enable/Disable Code ID

Code ID, a user-defined identification characters for symbologies, normally precedes Barcode Data field during data transmission when the associated parameter is enabled. Scan the appropriate barcode to enable or disable Code ID.

**Disable** BA040

**Enable** BA041

### 7-3-2-6. Set Position of Code ID

Scan the appropriate barcode to specify the position of Code ID you prefer to display as a part of transmitted data. Scan **Before** label to prefix Code ID to barcode data whereas read **After** label to append Code ID to barcode data.

Before BA050

After BA051

### 7-3-2-7. Enable/Disable Barcode Length Info

Scan the appropriate barcode to determine whether or not to send out length information of scanned barcode as part of transmitted data. If the feature is **Enabled**, length info will be prefixed to decoded barcode.

Disable BA060

Enable BA061

### 7-3-2-8. Enable/Disable Symbology Name

Scan the appropriate barcode to determine whether or not to transmit symbology name information which is normally prefixed to decoded barcode as part of transmitted data.

Disable BA070

Enable BA071

### 7-3-2-9. Enable/Disable Control Code Info

Scan the appropriate barcode to determine whether or not to transmit control code info along with the decoded message if the scanned barcode contains the special ASCII code.

Disable BA100

Enable BA101

### 7-3-2-10. Enable/Disable Delimiter

Scan the appropriate barcode to determine whether or not to interpose the delimiter parameter between the decoded message and timestamps.

Disable BA110

Enable BA111

### 7-3-2-11. Set Timestamps Positioning

Scan the appropriate barcode to specify the position of timestamps, to the left or the right of decoded message, when output data contains timestamp information. Scan **Before** label to position timestamps on the left side of the barcode, and read **After** label to append timestamps to the barcode**.**

Before BA120

After BA121

## 7-3-2-12. Enable/Disable Date Information

Scan the appropriate barcode to determine whether or not to transmit date information along with the decoded message.

**Disable** BA130

**Enable** BA131

## 7-3-2-13. Enable/Disable Time Information

Scan the appropriate barcode to determine whether or not to transmit time information along with the decoded message.

**Disable** BA140

**Enable** BA141

## 7-3-2-14. Reject Same

Scan the appropriate label to configure your scanner not to decode the barcode which is exactly the same to your previous scans. Scan **Enable** label to avoid possibility of consecutively reading the same barcode twice by accident. Otherwise, by default the scanner will decode barcodes without leaving out those unqualified barcodes.

**Disable** BA200

**Enable** BA201

## 7-3-2-15. Set Type of Case Conversion

This parameter allows you to initiate letter case conversion which treats the decoded message as a whole and converts it between upper case and lower case according to the setting. Scan the appropriate the label to specify the type of case conversion.

None BA380

Inverse BA381

Lower BA382

Upper BA383

## 7-3-2-16. Set Delimiter Between Date/Time Stamps and Barcode Data

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between timestamps and the decoded message to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-3-2-10** to enable the relevant delimiter parameter as well.

DelimiterChar BABE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **DelimiterChar** barcode to configure the delimiter.

(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-3-2-17. Set Delimiter Between Date and Time Stamps

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between timestamps and the decoded message to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-3-2-12** and to **Section 7-3-2-13** to enable time and date stamps as well.

**DateTimeSpareChar** BAAE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **DateTimeSpareChar** barcode to configure the delimiter.

(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-3-2-18. Set Preamble Code

In the process of transmitting data, Preamble Code normally precedes both Prefix Code and barcode data as a user-defined string to format the output data. Although Preamble Code and Prefix Code work similarly to structure the transmitted message, functionality they individually intend to perform differs. Basically, Preamble Code is designed to arrange a layout using line terminators, such as carriage return, line fee, line separator, paragraph separator and so on. Therefore, it is suggested to associate this configurable parameter with equivalent ASCII code value for line terminators whenever you possibly use Preamble Code in the hope of organizing the transmitted message. Please follow the below steps to configure Preamble Code.

**PreambleChar** BACE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **PreambleChar** barcode to configure Preamble Code.
(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set preamble code to be <CR><LF>, scan **0, D, 0** and then **A** to assign the specified hexadecimal value "0D0A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-3-2-19. Set Postamble Code

In the process of transmitting data, Postamble Code is appended to both Suffix Code and barcode data as a user-defined string to format the output data. However, Postamble Code not simply works like Suffix Code to better format the transmitted messages, but, to precisely describe it, expects to emulate line terminators to break transmission line. Consequently, it is strongly suggested to associate this configurable parameter with equivalent ASCII code value for line terminators. Please follow the below steps to configure Postamble Code.

**PostambleChar** BAEE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **PostambleChar** barcode to configure Postamble Code.
(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set postamble code to be <CR><LF>, scan **0, D, 0** and then **A** to assign the specified hexadecimal value "0D0A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-3-2-20. Set Prefix Code

In the process of transmitting data, Prefix Code is normally interposed between Preamble Code and barcode data as a user-defined string to format the output data. It seems that Preamble Code and Prefix Code both provide exactly the same formatting function, but in fact they work slight differently in terms of their functionality. Unlike Preamble Code which intends to function as line terminators to appropriately break line in data transit, Prefix Code is more inclined to clarify the difference among lines by binding with any type of characters which is only identifiable for you to achieve the attempt. Please follow the below steps to configure Prefix Code.

**PrefixChar** BB0E5

**(Length: 8 digits)**

**Procedure**

(1) Scan Enter barcode.

(2) Scan **PrefixChar** barcode to configure Prefix Code.

(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 8 characters in length. For instance, to set prefix code to be “ABCD”, scan **4, 1, 4, 2, 4, 3, 4,** and then **4** to assign the specified hexadecimal value "41424344".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-3-2-21. Set Suffix Code

In the process of transmitting data, Suffix Code is normally interposed between barcode data and Postamble Code as a user-defined string to format the output data. By binding this configurable parameter with parameter value which is identifiable for you to achieve the attempt, Suffix Code is meant to identify the difference among lines, whereas functionality of Postamble Code is to arrange the data format by breaking the transmission line. Please follow the below steps to configure Suffix Code.

**SuffixChar** BB8E5

**(Length: 8 digits)**



**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **SuffixChar** barcode to configure Suffix Code.

(3) Please refer to ASCII Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 8 characters in length. For instance, to set suffix code to be “EFGH”, scan **4, 5, 4, 6, 4, 7, 4,** and then **8** to assign the specified hexadecimal value "45464748".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4. Bluetooth Mode

Please be advised the following parameters in this section simply works for the associated operations in Bluetooth mode. Make sure that you appropriately conduct the operations using Bluetooth mode.

### 7-4-1. Output Interface Options

In terms of output interface options, it is more about technical configuration regarding how you want barcode data to be transmitted between devices in Bluetooth mode before scanned barcode is further processed. Properly configure your scanner according to the realistic situation will lead to satisfactory data transmission performance.

#### 7-4-1-1. Set Communication Protocol for SPP

Scan the appropriate barcode to specify the communication protocol for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**None** AC1C0

**0x06/0x15** AC1C1

**Ack/Nak** AC1C2

### 7-4-1-2. Enable/Disable <STX> and <ETX> Escape Characters for SPP

Scan the appropriate barcode to enable or disable <STX> and <ETX> escape characters for SPP if the associated operations are performed using RS-232 or USB COM interfaces. Regarding the more detailed configuration on escape characters, please refer to **Scanner Commands** which is located in the section 6-3 of Chapter 6.

**None** AC1A0

**STX/ETX** AC1A1

### 7-4-1-3. Enable/Disable <BAR> and <CMD> Escape Characters for SPP

Scan the appropriate barcode to enable or disable <BAR> and <CMD> escape characters for SPP if the associated operations are performed using RS-232 or USB COM interfaces. Regarding the more detailed configuration on escape characters, please refer to **Scanner Commands** which is located in the section 6-3 of Chapter 6.

**Disable** AC160

**Enable** AC161

### 7-4-1-4. Enable/Disable Command Mode for SPP

Scan the appropriate barcode to enable or disable Command mode for SPP if the associated operations are performed using RS-232 or USB COM interfaces.

**Disable** AC170

**Enable** AC171

## 7-4-1-5. Set Transfer Count for Time Delay for SPP

This parameter allows you to specify the number of digits which has to be transmitted to initiate a time delay referring to an intentional deferment of data transmission. Please follow the below steps to set the transfer count for time delay if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxCharGapCnt** AC9E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtSppTxCharGapCnt** barcode to configure the transfer count for time delay for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to initiate time delay after every five digits are transmitted, then scan **5** to assign the specified decimal value "5".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

### 7-4-1-6. Set Time Delay for a Digit for SPP

This parameter refers to the amount of elapsed time to delay transmitting a digit. Please follow the below steps to set time delay for transmitting a digit if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxCharGapTime** ACAE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtSppTxCharGapTime** barcode to configure delay time for a digit for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2, 0,** and then **0** to assign the specified decimal value "200".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.



### 7-4-1-7. Set Time Delay for a Record for SPP

This parameter refers to the amount of elapsed time to delay transmitting a record. Please follow the below steps to set time delay for transmitting a record if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxGapTime** ACBE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BtSppTxGapTime** barcode to configure delay time for a record for SPP.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a record for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

### 7-4-1-8. Set Time Delay for a Specified Digit for SPP

This parameter refers to the amount of elapsed time to delay transmitting a specified character. Please follow the below steps to set time delay for transmitting a specified digit if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxExtTime** ACCE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtSppTxExtTime** barcode to configure delay time for a specified digit for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a specified digit for 1 second, scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-9. Set Timeout for SPP

Timeout is initiated when the device keeps waiting for an event to occur and thus remains idle for a period of time during the data transmission. This parameter allows you to specify the amount of time to elapse before timeout is officially triggered. Please follow the below steps to configure the timeout period if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxOtTime** ACDE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BtSppTxOtTime** barcode to configure timeout parameter for SPP.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set timeout period to 1 second, then scan **1** to assign the specified decimal value "1".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

Enter



End

### 7-4-1-10. Set Retransmission Count for SPP

To avoid data transmission loss, messages sometimes have to be resent due to a failure to receive ACK signal. This parameter allows you to configure the number of attempting retransmission if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxAckCnt** ACEE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtSppTxAckCnt** barcode to configure timeout parameter for SPP.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set retransmission count to 1, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-11. Set ACK Timeout for SPP

ACK timeout refers to the allotted time to elapse for the receipt of ACK signal before timeout is initiated. This parameter allows you to specify the amount of time allocated for ACK timeout if the associated operations are performed using RS-232 or USB COM interfaces.

**BtSppTxAckTime** ACFE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BtSppTxAckTime** barcode to configure ACK timeout for SPP.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to set ACK timeout to be 1, then scan **1** to assign the specified decimal value "1".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-1-12. Set Caps Lock Setting for HID

This parameter provides the alternative to emulate Caps Lock which is a lock key to change the letter case of the typed alphabets. Read either **Caps Lock On** or **Caps Lock off** label to initiate the inversion of the letter case. However, in this case, the status of Caps Lock on your physical keyboard should be also taken into account. As to the mutual interaction between Caps lock key on the keyboard and the capital settings, please refer to the below chart to achieve the attempt. However, in addition to the two options mentioned earlier, there are two other alternatives for you to choose from as well: Scan **Alt+Keyoad** label to determine the letter case of typed alphabets by keystroke combinations of Alt + ASCII code , regardless of the status of Caps Lock key; Or, Read **Auto** label to transmit the barcode data without inverting its case.

**Example**

**ABCdef** ABCdef

| Cap Locks Status / Scanner Options | Caps Lock On | Caps Lock Off |
|---|---|---|
| **Caps Lock On** | ABCdef | abcDEF |
| **Caps Lock Off** | abcDEF | ABCdef |
| **Alt+Keypad** | ABCdef | ABCdef |

**Auto** AD0A0

**Caps Lock Off** AD0A1

**Caps Lock On** AD0A2

**Alt+Keypad** AD0A3

### 7-4-1-13. Enable/Disable Num Lock for HID

Scan the appropriate barcode to enable or disable Num Lock if the associated operations are performed using USB HID interface.

**Disable** AD060

**Enable** AD061

## 7-4-1-14. Set IMEs for HID

IME is a program which allows users to input different sets of characters derived from different languages. Scan the appropriate barcode to specify active Input Method Editors if the associated operations are performed using USB HID interfaces.

EN AD1C0

UK AD1C1

JP AD1C2

FR AD1C3

GR AD1C4

IT AD1C5

SP AD1C6

PO AD1C7

SK AD1C8

KO AD1C9

TR AD1CA

## 7-4-1-15. Set Character Coding Method for HID

According to the ending method of barcodes in hand, scan the appropriate label to specify the associated character coding method if the associated operations are performed using USB HID interface.

US AD2C0

Big5 AD2C1

Gb3121 AD2C2

Sjis AD2C3

## 7-4-1-16. Set Transfer Count for Time Delay for HID

This parameter allows you to specify the number of digits which has to be transmitted to initiate a time delay referring to an intentional deferment of data transmission. Please follow the below steps to set the transfer count for time delay if the associated operations are performed using USB HID interface.

**BtHidTxCharGapCnt** AD9E0

**(Length: 1 digit/ Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtHidTxCharGapCnt** barcode to configure the transfer count for time delay for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcode s representing the desired value in the range of 0 to 255. For instance, to initiate a timeout after 10 digits are transmitted, scan **1** first and then **0** to assign the specified decimal value “10”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.



## 7-4-1-17. Set Time Delay for a Digit for HID

This parameter refers to the amount of elapsed time to delay transmitting a digit. Please follow the below steps to set time delay for transmitting a digit for HID if the associated operations are performed using USB HID interface.

**BtHidTxCharGapTime** ADAE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtHidTxCharGapTime** barcode to configure delay time for a digit for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2, 0** and then **0** to assign the specified decimal value "200".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-18. Set Time Delay for a Record for HID

This parameter refers to the amount of elapsed time to delay transmitting a record. Please follow the below steps to set time delay for transmitting a record if the associated operations are performed using USB HID interfaces.

**BtHidTxGapTime** ADBE0

**(Length: 1 digit / Range: 0-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtHidTxGapTime** barcode to configure delay time for a record for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-19. Set Time Delay for a Specified Digit for HID

This parameter refers to the amount of elapsed time to delay transmitting a specified character. Please follow the below steps to set time delay for transmitting a specified digit if the associated operations are performed using USB HID interfaces.

**BtHidTxExtTime** ADCE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtHidTxExtTime** barcode to configure delay time for a specified digit for HID.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to defer transmitting a digit for 1 seconds, then scan **1** to assign the specified decimal value "1".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-20. Set Timeout for HID

Timeout is initiated when the device keeps waiting for an event to occur and thus remains idle for a period of time during the data transmission. This parameter allows you to specify the amount of time to elapse before timeout is officially triggered. Please follow the below steps to configure the timeout period for HID if the associated operations are performed using USB COM interfaces.

**BtHidTxOtTime** ADDE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BtHidTxOtTime** barcode to configure timeout parameter for HID.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set the timeout period to be 3 second, then scan **3** to assign the specified decimal value "3".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-4-1-21. Set PIN Code

Pin Code information is required to establish a Bluetooth connection. During the pairing process, you may be asked to enter Pin code for the verification to ensure the identity, and then granted the permission to access the device as a successful verification result. Please follow the below steps to configure Pin Code info.

**BtPinCode** AE0E9

**(Length: 8 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtPinCode** barcode to configure Pincode parameter.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan desired decimal value barcodes representing the desired number which contains at most 8 digits. For instance, to set PIN code to be "1234", scan **1, 2, 3,** and then **4** to assign the specified decimal value "1234".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-22. Set Bluetooth address

Mac Address information is required for the scanner to locate the Bluetooth devices, except for Bluetooth dongle A302/A303, for establishment of a Bluetooth connection. Please associate this parameter with the Bluetooth address of the Bluetooth device.

**BtMacAddr** AE8FE

**(Length: 12 digits/ Range: 0-F)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtMacAddr** barcode to configure Mac Address.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 12 characters in length. For instance, to set Bluetooth Address to be "001C97FE16EC", scan **0, 0, 1, C, 9, 7, F, E, 1, 6, E** and then **C** to assign the specified hexadecimal value "001C97FE16EC".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 7-4-1-23. Set Machine Name

Machine Name refers to the name of the scanner and serves as an identification name for other Bluetooth devices, except for Bluetooth dongle A302/A303, to initiate the pairing process. Scan the below barcode to specify the preferred machine name for the scanner.

**BtDevName** AF4E6

**(Length: 12 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtDevName** barcode to configure the machine name.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 12 characters in length. For instance, to set the device name to be "BT Scanner", scan **5, 2, 5, 4, 2, 0, 5, 3, 6, 3, 6, 1, 6, E, 6, E, 6, 5 ,7** and then **2** to assign the specified hexadecimal value "5254205363616E6E6572".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.



## 7-4-1-24. Set Bluetooth address for Dongle A302/A303

Mac Address information is required for the scanner to locate Bluetooth dongle A302/303 for establishment of a Bluetooth connection. Please associate this parameter with the Bluetooth address of the Bluetooth device.

**BtMacAddr** B08FE

**(Length: 12 digits/ Range: 0-F)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BtMacAddr** barcode to configure Mac Address.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 12 characters in length. For instance, to set Bluetooth Address to be “001C97FE16EC”, scan **0, 0, 1, C, 9, 7, F, E, 1, 6, E** and then **C** to assign the specified hexadecimal value “001C97FE16EC”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-1-25. Set Machine Name for Dongle A302/A303

Machine Name refers to the name of scanner and serves as an identification name especially for Bluetooth dongle A302/303 to initiate the pairing process. Scan the below barcode to specify the preferred machine name for the scanner.

**BtDevName** B14E6

**(Length: 12 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BtDevName** barcode to configure the machine name.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 12 characters in length. For instance, to set the device name to be “BT Scanner”, scan **5, 2, 5, 4, 2, 0, 5, 3, 6, 3, 6, 1, 6, E, 6, E, 6, 5 ,7** and then **2** to assign the specified hexadecimal value “5254205363616E6E6572”.
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-2. Scanner Options

A selection of scanner options, from setting button functions to adjusting the buzzer volume and vibrator, is offered to personalize the device to suit your usage habits.

### 7-4-2-1. Set Scan Mode

Scan Mode refers to how the scanner reacts to the scanned barcode. If **Good Read On** is activated, LED light stays on when Scan Button is pressed down, and turns off when Scan button is released or a barcode is scanned. However, with **Good Read Off** settings, LED will remain lit for a specified period of time after Scan Button is pressed. In this case, LED will turn off only when the barcode is successfully decoded or the timeout period expires. Please scan the appropriate label to determine your preferred scan mode.

GoodReadOn BE080

GoodReadOff BE081

### 7-4-2-2. Set Output Interface

Please scan the appropriate barcode to specify the output interface which is used to establish a Bluetooth connection.

Slave BE1D1

Master BE1D2

Hid BE1D3

iOS BE1D4

A303 BE1D5



A302 BE1D6

### 7-4-2-3. Set Small Trigger Functionality

Small Trigger is designed to perform various supplementary operations, from initiating battery charge to switching to data transmission mode, according to the length of time the button has been pressed. To facilitate the associated operations with Small Trigger, this parameter is available to specify the degree of Small Trigger's functionality. Scan **Disable** label to specify Small Trigger will not provide any additional function. On the other hand, when **Mem Tx** is enabled, the device is able to switch to data transmission mode by keeping holding Small Trigger long enough to trigger off a solid blue LED light. By default, Small Trigger is set for maximum functionality without limit.

Disable BE290

Mem Tx BE292

Normal BE293

### 7-4-2-4. Set Composite Triggers Functionality

Some supplementary functions are necessarily executed by using composite triggers though Scan Button primarily serves to scan barcodes, and Small Trigger to initiate data transmission. In Bluetooth mode, Bluetooth paring is an extra function which can be initiated by pressing Small Trigger and Scan Button in a specified sequence described below: while holding Small Trigger till the blue LED light starts flashing rapidly, press down Scan Button at the same time and then release both buttons. Scan the appropriate label to enable or disable pairing functionality.

Disable BE280

Pair BE281

### 7-4-2-5. Enable/Disable Battery Charge

Scan the appropriate barcode to determine whether to initiate battery charge whenever the device is well connected to host PC using an interface cable and switched to Bluetooth mode.

**Disable** BE380

**Enable** BE381

### 7-4-2-6. Set Good Read Buzzer Volume

Scan the appropriate barcode to specify the volume of Good Read Buzzer when a barcode is decoded successfully. The higher level indicates the louder sound.

**Level1** BE480

**Level2** BE481

**Level3** BE482

**Level4** BE483

### 7-4-2-7. Set Warning Buzzer Volume

Scan the appropriate barcode to specify the volume of Warning Buzzer when an error occurs. The higher level indicates the louder sound.

**Level1** BE490

**Level2** BE491

Level3 BE492

Level4 BE493

## 7-4-2-8. Set Mode Event Buzzer Volume

Scan the appropriate barcode to specify the volume of Mode Event Buzzer when certain operations, such as switching operation modes, entering data transmission mode, and initiating Bluetooth pairing, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. The higher level indicates the louder sound.

Level1 BE4A0

Level2 BE4A1

Level3 BE4A2

Level4 BE4A3

## 7-4-2-9. Enable/Disable Good Read Vibrator

Scan the appropriate barcode to enable or disable Good Read Vibrator when a barcode is successfully decoded.

Disable BE500

Enable BE501

### 7-4-2-10. Enable/Disable Warning Vibrator

Scan the appropriate barcode to enable or disable Warning Vibrator when an error occurs.

**Disable** BE510

**Enable** BE511

### 7-4-2-11. Enable/Disable Mode Event Vibrator

Mode Event Vibrator is used to give a vibration signal whenever certain operations, such as switching operation modes, entering data transmission mode, and initiating Bluetooth pairing, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Vibrator.

**Disable** BE520

**Enable** BE521

### 7-4-2-12. Enable/Disable Good Read Buzzer

Scan the appropriate barcode to enable or disable Good Read Buzzer when a barcode is successfully decoded.

**Disable** BE600

**Enable** BE601

## 7-4-2-13. Enable/Disable Warning Buzzer

Scan the appropriate barcode to enable or disable Warning Buzzer when an error occurs.

**Disable** BE610

**Enable** BE611

## 7-4-2-14. Enable/Disable Mode Buzzer

Mode Event Buzzer is used to give an acoustic signal whenever certain operations, such as switching operation modes, entering data transmission mode, and initiating Bluetooth pairing, are initiated by using Scan Button or Small Trigger so that LED indicator accordingly changes its blinking frequency or color. Scan the appropriate barcode to enable or disable Mode Event Buzzer.

**Disable** BE620

**Enable** BE621

## 7-4-2-15. Set Pairing Timeout

Pairing Timeout refers to an amount of time allocated to the scanner for pairing with other Bluetooth devices. When timeout period expires yet the Bluetooth connection is not established, the pairing process will terminate due to the failed attempt. Please follow the below steps to configure pairing timeout.

**PairingTime** BF4E0

**(Length: 1 digit / Range: 30-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **PairingTime** barcode to configure Pairing Timeout.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set pairing timeout to be 20 seconds, scan **2** first and then **0** to assign the specified decimal value "20".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-2-16. Set Good Read Buzzer Frequency

Please follow the below steps to specify the buzzer frequency when a barcode is decoded successfully.

**BzGoodRdFreq** BF5E0

**(Length: 1 digit / Range: 1-50/ Unit: 100Hz)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **BzGoodRdFreq** barcode to configure Good Read buzzer frequency.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer frequency to 10000 Hz, scan **1, 0** and then **0** to assign the specified decimal value "100".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-2-17. Set Good Read Buzzer Duration

Please follow the below steps to specify buzzer duration when a barcode is decoded successfully.

**BzGoodRdTime** BF6E0

**(Length: 1 digit / Range: 1-255/ Unit: 10ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BzGoodRdTime** barcode to configure Good Read buzzer duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set Good Read buzzer duration for 0.2 seconds, scan **2** first and then **0** to assign the specified decimal value "20".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-2-18. Set Hibernation Duration

While remaining inactive for a period of time, the device will be forced to enter power-saving mode for considerations to lower power consumption. As a result, this parameter is available to specify the amount of time allocated for the device to stay in hibernation. Once the specified time period expires, the scanner will be shut down immediately. Please follow the below steps to configure hibernation duration.

**BarHibernateTime** BF9E0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarHibernateTime** barcode to configure hibernation duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set hibernation duration to be 10 seconds, scan **1** first and then **0** to assign the specified decimal value “10”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-2-19. Set Activation Duration

In general, after Scan button is pressed down, LED light will emit a stream of light for a scan attempt. This parameter is thus used to specify activation duration which indicates the amount of time LED light will stays on after Scan button is held.

**BarScanTime** BFAE0

**(Length: 1 digit / Range: 5-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarScanTime** barcode to configure activation duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal values barcodes representing the desired value in the range of 0 to 255. For instance, to set activation duration to be 2 seconds, then scan **2** to assign the specified decimal value "2".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-2-20. Set Idle Duration

The device will switch to power-saving mode after remaining idle for a while. This parameter is thus used to specify the length of time allocated for the scanner to elapse before power-saving mode is initiated.

**BarIdleTime** BFBE0

**(Length: 1 digit / Range: 0-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **BarIdleTime** barcode to configure idle duration.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set idle duration to be 3 seconds, the scan **3** to assign the specified decimal value "3".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-2-21. Set Standby Duration

After lengthy idleness, the device will first be put into standby state in which the machine is still able to react to the emergent request yet running in lower power consumption. This parameter refers to the amount of time allocated for the device to stay in standby before being totally shut down.

**StandbyTime** BFFE0

**(Length: 1 digit / Range: 30-255/ Unit: 1000ms)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **StandbyTime** barcode to configure idle duration.
(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 30 to 255. For instance, to set Standby duration to be 50 seconds, scan **5** first and then **0** to assign the specified decimal value "50".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-3. Output Editing Options

The parameters fallen into this category focus on functionality relevant to output editing in Bluetooth mode. With these available editing settings, you can arrange plentiful scanned barcode in your own style and accordingly results in a subtle output layout which will benefit users from locating barcode data more efficiently.

### 7-4-3-1. Enable/Disable Preamble Code

Preamble Code refers to a sequence of characters which precedes both Prefix Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Preamble Code.

**Disable** C0000

**Enable** C0001

### 7-4-3-2. Enable/Disable Postamble Code

Postamble Code refers to a sequence of characters which appends to both barcode data and Suffix Code during data transmission. Scan the appropriate barcode to enable or disable Postamble Code.

**Disable** C0010

**Enable** C0011

### 7-4-3-3. Enable/Disable Prefix Code

Prefix Code is a sequence of characters interposed between Preamble Code and barcode data during data transmission. Scan the appropriate barcode to enable or disable Prefix Code.

Disable C0020

Enable C0021

### 7-4-3-4. Enable/Disable Suffix Code

Suffix Code is a sequence of characters interposed between barcode data and Postamble Code during data transmission. Scan the appropriate barcode to enable or disable Suffix Code.

Disable C0030

Enable C0031

### 7-4-3-5. Enable/Disable Code ID

Code ID, a user-defined identification characters for symbologies, normally precedes Barcode Data field during data transmission when the associated parameter is enabled. Scan the appropriate barcode to enable or disable Code ID.

Disable C0040

Enable C0041

### 7-4-3-6. Set Position of Code ID

Scan the appropriate barcode to specify the position of Code ID you prefer to display as a part of transmitted data. Scan **Before** label to prefix Code ID to barcode data whereas read **After** label to append Code ID to barcode data.

Before C0050

After C0051

### 7-4-3-7. Enable/Disable Barcode Length Info

Scan the appropriate barcode to determine whether or not to send out length information of scanned barcode as part of transmitted data. If the feature is **Enabled**, length info will be prefixed to decoded barcode.

Disable C0060

Enable C0061

### 7-4-3-8. Enable/Disable Symbology Name

Scan the appropriate barcode to determine whether or not to transmit symbology name information which is normally prefixed to decoded barcode as part of transmitted data.

Disable C0070

Enable C0071

### 7-4-3-9. Enable/Disable Control Code Info

Scan the appropriate barcode to determine whether or not to transmit control code info along with the decoded message if the scanned barcode contains the special ASCII code.

**Disable** C0100

**Enable** C0101

### 7-4-3-10. Enable/Disable Delimiter

Scan the appropriate barcode to determine whether or not to interpose the delimiter parameter between the decoded message and timestamps.

**Disable** C0110

**Enable** C0111

### 7-4-3-11. Set Timestamps Positioning

Scan the appropriate barcode to specify the position of timestamps, to the left or the right of decoded message, when output data contains timestamp information. Scan **Before** label to position timestamps on the left side of the barcode, and read **After** label to append timestamps to the barcode**.**

**Before** C0120

**After** C0121

### 7-4-3-12. Enable/Disable Date Information

Scan the appropriate barcode to determine whether or not to transmit date information along with the decoded message.

**Disable** C0130

**Enable** C0131

### 7-4-3-13. Enable/Disable Time Information

Scan the appropriate barcode to determine whether or not to transmit time information along with the decoded message.

**Disable** C0140

**Enable** C0141

### 7-4-3-14. Set Type of Case Conversion

This parameter allows you to initiate letter case conversion which treats the decoded message as a whole and converts it between upper case and lower case according to the setting. Scan the appropriate the label to specify the type of case conversion.

**None** C0380

**Inverse** C0381

**Lower** C0382

**Upper** C0383

## 7-4-3-15. Set Delimiter Between Date/Time Stamps and Barcode Data

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between timestamps and the decoded message to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-4-3-10** to enable the relevant delimiter parameter as well.

**DelimiterChar** C0BE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **DelimiterChar** barcode to configure the delimiter.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-3-16. Set Delimiter Between Date and Time Stamps

Delimiter refers to a specified character or a set of characters used to divide lengthy transit data into a group of data. By associating the parameter with the valid value, the specified delimiter will be interposed between Time and Date stamps to have transmitted data better formatted. However, to make sure this parameter functions properly, please refer to **Section 7-4-3-12** and **Section 7-4-3-13** to enable time and date stamps as well.

**DateTimeSpareChar** C0AE2

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **DateTimeSpareChar** barcode to configure the delimiter.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use ";" character to break down the output string, scan **3** first and then **B** to assign the specified hexadecimal value "3B".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-3-17. Set Preamble Code

In the process of transmitting data, Preamble Code normally precedes both Prefix Code and barcode data as a user-defined string to format the output data. Although Preamble Code and Prefix Code work similarly to structure the transmitted message, functionality they individually intend to perform differs. Basically, Preamble Code is designed to arrange a layout using line terminators, such as carriage return, line fee, line separator, paragraph separator and so on. Therefore, it is suggested to associate this configurable parameter with equivalent ASCII code value for line terminators whenever you possibly use preamble code in the hope of organizing the transmitted message. Please follow the below steps to configure Preamble Code.

**PreambleChar** C0CE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **PreambleChar** barcode to configure Preamble Code.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired the desired string which has to be at most 2 characters in length. For instance, to set preamble code to be <CR><LF>, scan **0, D, 0,** and then A to assign the specified hexadecimal value "0D0A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 7-4-3-18. Set Postamble Code

In the process of transmitting data, Postamble Code is appended to both Suffix Code and barcode data as a user-defined string to format the output data. However, Postamble Code not simply works like Suffix Code to better format the transmitted messages, but, to precisely describe it, expects to emulate line terminators to break transmission line. Consequently, it is strongly suggested to associate this configurable parameter with equivalent ASCII code value for line terminators. Please follow the below steps to configure Postamble Code.

**PostambleChar** C0EE3

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **PostambleChar** barcode to configure Postamble Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired the desired string which has to be at most 2 characters in length. For instance, to set postamble code to be <CR><LF>, scan **0, D, 0,** and then **A** to assign the specified hexadecimal value "0D0A".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-3-19. Set Prefix Code

In the process of transmitting data, Prefix Code is normally interposed between Preamble Code and barcode data as a user-defined string to format the output data. It seems that Preamble Code and Prefix Code both provide exactly the same formatting function, but in fact they work slight differently in terms of their functionality. Unlike Preamble Code which intends to function as line terminators to appropriately break line in data transit, Prefix Code is more inclined to clarify the difference among lines by binding with any type of characters which is only identifiable for you to achieve the attempt. Please follow the below steps to configure Prefix Code.

PrefixChar C10E5

(Length: 8 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **PrefixChar** barcode to configure Prefix Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired the desired string which has to be at most 8 characters in length. For instance, to set prefix code to be “ABCD”, scan **4, 1, 4, 2, 4, 3, 4,** and then **4** to assign the specified hexadecimal value "41424344".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 7-4-3-20. Set Suffix Code

In the process of transmitting data, Suffix Code is normally interposed between barcode data and Postamble Code as a user-defined string to format the output data. By binding this configurable parameter with parameter value which is identifiable for you to achieve the attempt, Suffix Code is meant to identify the difference among lines, whereas functionality of Postamble Code is to arrange the data format by breaking the transmission line. Please follow the below steps to configure Suffix Code.

SuffixChar C18E5

(Length: 8 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **SuffixChar** barcode to configure Suffix Code.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired the desired string which has to be at most 8 characters in length. For instance, to set suffix code to be “EFGH”, scan **4, 5, 4, 6, 4, 7, 4,** and then **8** to assign the specified hexadecimal value "45464748".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.



# 8. Configuring Symbology

This chapter is to present the supported symbol options, and to further illustrate how to work out the relevant symbology configurations. Before attempting every scan sequence, please refer to the configuration chart illustrated in Chapter 3 to ensure you do follow the correct procedures for setting up your scanner.

## 8-1. Default Setting

| Symbology | Enable/Disable | Code ID |
|---|---|---|
| AuPost | Disabled | P3 |
| Aztec | Disabled | D3 |
| CaPost | Disabled | P6 |
| CodaBar | Enabled | B7 |
| CodaBlock A | Disabled | K0 |
| CodaBlock F | Disabled | K1 |
| Code-11 | Disabled | C1 |
| Code-128 | Enabled | B3 |
| Code-39 | Enabled | B1 |
| Code-93 | Disabled | B6 |
| Data Matrix | Disabled | D0 |
| GS1 Composite-A/B | Disabled | G0 |
| GS1 Composite-C | Disabled | G1 |
| GS1 DataBar (RSS14) | Disabled | C3 |
| GS1 DataBar (Limited) | Disabled | C4 |
| GS1 DataBar (Expanded) | Disabled | C5 |
| Industrial 25 | Disabled | B5 |
| Info Mail | Disabled | P8 |
| Intelligent Mail | Disabled | PA |
| Interleave 2 of 5 | Disabled | B2 |
| JP Post | Disabled | P5 |
| Matrix 25 | Disabled | B4 |
| MaxiCode | Disabled | D2 |
| MSI | Disabled | B8 |
| NI Post | Disabled | P4 |
| PDF 417 | Enabled | C7 |
| Micro PDF 417 | Enabled | C8 |
| PLANET | Disabled | P1 |
| Plessey | Disabled | C2 |
| POSTNET | Disabled | P0 |
| QR Code | Enabled | D1 |
| SePost | Disabled | P7 |
| Telepen | Disabled | C6 |

| Symbology | Enable/Disable | Code ID |
|---|---|---|
| TLC39 | Disabled | H0 |
| UKPost | Disabled | P2 |
| UPC-A | Enabled | A0 |
| UPC-E | Enabled | E0 |
| EAN-13 | Enabled | F |
| EAN-8 | Enabled | FF |

## 8-2. AuPost

### 8-2-1. Enable/Disable AuPost

Scan the appropriate barcode to determine whether or not to enable AuPost.

Disable 34400

Enable 34401

### 8-2-2. Set Code ID for AuPost

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for AuPost.

AuPostUDSI 34C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **AuPostUDSI** barcode to tailor Code ID for AuPost to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Au", scan **4, 1, 7,** and then **5** to assign the specified hexadecimal value "4175".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-3. Aztec

### 8-3-1 Enable/Disable Aztec

Scan the appropriate barcode to determine whether or not to enable Aztec.

Disable 53400

Enable 53401

### 8-3-2 Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-3-4** for more details about configurations of the length scale.

Min 53530

Fixed 53531

Min/Max 53532

## 8-3-3 Set Code ID for Aztec

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Aztec.

AztecUDSI 53C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **AztecUDSI** barcode to tailor Code ID for Aztec to your needs.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Az", scan **4, 1, 7,** and then **A** to assign the specified hexadecimal value "417A".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 8-3-4 Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-3-2. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **AztecLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **AztecLen1** to **AztecLen2**. In this case, **AztecLen1** stands for the minimum and **AztecLen2** for the maximum. However, **AztecLen1, AztecLen2,** and **AztecLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **AztecLen1, AztecLen2, or AztecLen3.**



AztecLen1 53902

(Length: 2 digits / Range: 0-65536)

AztecLen2 53912

(Length: 2 digits / Range: 0-65536)

AztecLen3 53922

(Length: 2 digits / Range: 0-65536)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **AztecLen1L** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 65536. For instances, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for AztecLen2L and AztecLen3L, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-4. UKPost

### 8-4-1. Enable/Disable UKPost

Scan the appropriate barcode to determine whether or not to enable UKPost.

Disable 32400

Enable 32401

## 8-4-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 32540

Enable 32541

## 8-4-3. Set Code ID for UKPost

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for UKPost.

UKPostUDSI 32C02
(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **UKPostUDSI** barcode to tailor Code ID for UKPost to your needs.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "UK", scan **5, 5, 4,** and then **B** to assign the specified hexadecimal value "554B".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 8-5. CaPost

### 8-5-1. Enable/Disable CaPost

Scan the appropriate barcode to determine whether or not to enable CaPost.

Disable 33400

Enable 33401

### 8-5-2. Set Code ID for CaPost

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for CaPost.

CaPostUDSI 33C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **CaPostUDSI** barcode to tailor Code ID for CaPost to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Ca", scan **4, 3, 6,** and then **1** to assign the specified hexadecimal value "4361".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-6. CodaBar

### 8-6-1. Enable/Disable CodaBar

Scan the appropriate barcode to determine whether or not to enable CodaBar.

**Disable** 40400

**Enable** 40401

### 8-6-2. Configure Start/Stop Characters

The availability of four options below allows you to decide how you want to send out the start and stop characters as part of CodaBar codes. Scan **Notrans** label to eliminate the start and stop characters from the output data. As a substitute, you may also send out codes in other alternative forms: to transmit **a,b,c,d** as start and stop symbols, to add **a,b,c,d** and **t,n,*,e** individually to the start and the end of transmitted CodaBar data, or to use **DC1,DC2,DC3,DC4** instead. Scan the appropriate barcode to specify which patterns you prefer to program the device.

**NoTrans** 40580

**a,b,c,d** 40581

**a,b,c,d / t, n, *, e** 40583

**DC1, DC2, DC3, DC4** 40584

## 8-6-3. Configure Concatenation Mode

Barcode Concatenation will automatically concatenate two adjacent codes which meet the certain rules. By default the scanner will initiate symbol concatenation when the start digit of second barcode equals to the stop digit of first barcode, and then transmit the concatenated message with the start/stop digits omitted. In contrast, **No Restriction** will compulsorily concatenate adjoining codes, regardless of the values of the start and stop digits. Scan the appropriate label to specify the condition under which symbol concatenation will be performed.

**No Restriction** 405B0

**2nd start = 1st stop** 405B1

## 8-6-4. Enable/Disable Concatenation

This parameter allows you to enable or disable barcode concatenation feature. The **Concatenation** setting will simply transmit the concatenated codes in compliance with concatenation rules, yet not sending out the single code. Scan **Both** label when you wish the device to transmit not only the single barcode but also the concatenated data.

**Disable** 405A0

**Concatenation** 405A1

**Both** 405A2

## 8-6-5. Enable/Disable CLSI Library System

This parameter is to rearrange the scanned CodaBar code by adding a space after 1st, 5th, and 10th character of the barcode in compliance with standards of CLSI library system. Scan appropriate barcode to determine whether or not to initiate the function.

Disable 40590

Enable 40591

## 8-6-6. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 40540

Enable 40541

## 8-6-7. Verify Check Digit

Check digit algorithms provide the error-detection functions. When this feature is enabled, the device will only decode the barcodes which contain check digit to authenticate the decoded barcodes. Scan the appropriate barcode to determine whether to verify check digit.

Disable 404C0

Enable 404C1

## 8-6-8. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-6-10** for more details about configurations of the length scale.

Min 40530

Fixed 40531

Min/Max 40532

## 8-6-9. Set Code ID for CodaBar

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for CodaBar.

CodaBarUDSI 40C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **CodaBarUDSI** barcode to tailor Code ID for CodaBar to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "CB", scan **4, 3, 4,** and then **2** to assign the specified hexadecimal value "4342".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-6-10. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-6-8. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **CodabarLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **CodabarLen1** to **CodabarLen2**. In this case, **CodabarLen1**



stands for the minimum and **CodabarLen2** for the maximum. However, **CodabarLen1, CodabarLen2,** and **CodabarLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **CodabarLen1, CodabarLen2, or CodabarLen3.**

**CodabarLen1** 40501

**(Length: 1 digit / Range: 0-255)**

**CodabarLen2** 40511

**(Length: 1 digit / Range: 0-255)**

**CodabarLen3** 40521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **CodaBarLen1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value"8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for CodabarLen2 and CodabarLen3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-7. CodaBlock

### 8-7-1. Enable/Disable CodaBlock A

Scan the appropriate barcode to determine whether or not to enable CodaBlock A.

Disable 4D400

Enable 4D401

### 8-7-2. Enable/Disable CodaBlock F

Scan the appropriate barcode to determine whether to enable CodaBlock F.

Disable 4D410

Enable 4D411

### 8-7-3. Set Code ID for CodaBlock A

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for CodaBlock A.

CodaBlockAUDSI 4DC02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **CodaBlockAUDSI** barcode to tailor Code ID for CodaBlock A to your needs.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "CA", scan **4, 3, 4,** and then **1** to assign the specified hexadecimal value "4341".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 8-7-4. Set Code ID for CodaBlock F

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for CodaBlock F.

**CodaBlockFUDSI** 4DC12

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **CodaBlockFUDSI** barcode to tailor Code ID for CodaBlock F to your needs.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "CF", scan **4, 3, 4,** and then **6** to assign the specified hexadecimal value "4346".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

## 8-8. Code11

### 8-8-1. Enable/Disable Code11

Scan the appropriate barcode to determine whether or not to enable Code11.

Disable 4A400

Enable 4A401

### 8-8-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 4A540

Enable 4A541

### 8-8-3. Verify Check Digit

Check digit algorithms provide the error-detection functions. When this feature is enabled, the device will only decode the barcodes which contain check digit to authenticate the decoded barcodes. Different from other symbologies, Code11 especially employs two checksum digits to provide stricter error-control mechanism depending on the length of the message. Scan the appropriate barcode to determine whether to verify the check digit, or even further to specify the sizes of the checksum when the function of checksum verification is enabled.

Disable 4A4C0

1 Digit 4A4C1

2 Digits 4A4C2

## 8-8-4. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-8-6** for more details about configurations of the length scale.

**Min** 4A530

**Fixed** 4A531

**Min/Max** 4A532

## 8-8-5. Set Code ID for Code11

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Code11.

**Code11UDSI** 4AC02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.
(2) Scan **Code11UDSI** barcode to tailor Code ID for Code11 to your needs.
(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 2 characters in length. For instance, to set its Code ID to be "11", scan **3, 1, 3,** and then **1** to assign the specified hexadecimal value "3131".
(4) Scan **SET** barcode to complete the variable-binding operation.
(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-8-6. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-8-4. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Code11Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Code11Len1** to **Code11Len2**. In this case, **Code11Len1** stands for the minimum and **Code11Len2** for the maximum. However, **Code11Len1, Code11Len2,** and **Code11Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Code11Len1, Code11Len2, or Code11Len3.**

**Code11Len1** 4A501

**(Length: 1 digit / Range: 0-255)**

**Code11Len2** 4A511

**(Length: 1 digit / Range: 0-255)**

**Code11Len3** 4A521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code11Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired value in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for Code11Len2 and Code11Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter



End

## 8-9. Code39

### 8-9-1. Enable/Disable Code39

Scan the appropriate barcode to determine whether or not to enable Code39.

Disable C4000

Enable C4001

### 8-9-2. Transmit Start/Stop Delimiters

Code 39 barcode contains asterisk characters as delimiters. Scan the appropriate barcode to determine whether to transmit the start and the end symbols of the Code39 barcode.

Disable C4030

Enable C4031

### 8-9-3. Truncate Leading Zeros

Scan **Enable** label to shrink the barcode message by getting rid of leading zeros.

Disable C4060

Enable C4061

## 8-9-4. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

**Disable** C4070

**Enable** C4071

## 8-9-5. Configure Checksum Type

Scan the appropriate barcode to determine whether or not to enable the checksum algorithm which further detects if an error occurs during the decoding process.

**Disable** C4180

**Mod 43** C4181

## 8-9-6. Set Code ID for Code39

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Code39.

**Code39UDSI** 42C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code39UDSI** barcode to tailor Code ID for Code39 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "39", scan **3, 3, 3,** and then **9** to assign the specified hexadecimal value "3339".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-9-7. Set Length Scale

Length qualification has to work with the length scale collaboratively. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Code39Len1** variable stands for the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Code39Len1** to **Code39Len2**. However, **Code39Len1, Code39Len2,** and **Code39Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Code39Len1, Code39Len2,** or **Code39Len3.**

**Code39Len1** C52E0

**(Length: 1 digit / Range: 0-255)**

**Code39Len2** C53E0

**(Length: 1 digit / Range: 0-255)**

**Code39Len3** C54E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code39Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value “8”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for Code39Len2 and Code39Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-9-8. Remove Leading Characters for Code39

**TrunLead** parameter allows you to specify the number of characters which you intend to remove forwards from the start of Code39 barcode. In doing so, you are able to format the decoded message beforehand by taking out the necessary barcode parts and preserve the desired segments for your benefit. Follow the below procedure to complete the configuration:

**TrunLead** C55E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **TrunLead** barcode to specify the number of characters to delete forwards from the start of the decoded data.

(3) Please refer to Decimal/Hexadecimal table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to remove first three digits out of every Code 39 symbol, then scan **3** to assign the specified decimal value “3”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-9-9. Remove Trailing Characters for Code39

**TrunEnd** parameter allows you to specify the number of characters which you intend to remove backwards from the end of Code39 barcode. In doing so, you are able to format the decoded message beforehand by taking out the necessary barcode parts and preserve the desired segments for your benefit. Follow the below procedure to complete the configuration:

**TrunEnd** C56E0

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **TrunEnd** barcode to specify the number of characters to delete backwards from the end of the decoded data.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to remove the last two digits out of every Code 39 symbol, then scan **2** to assign the specified decimal value "2".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-10. Code93

### 8-10-1. Enable/Disable Code93

Scan the appropriate barcode to determine whether or not to enable Code93.

Disable 41400

Enable 41401

### 8-10-2. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-10-4** for more details about configurations of the length scale.

Min 41530

Fixed 41531

Min/Max 41532

### 8-10-3. Set Code ID for Code93

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Code93.

**Code93UDSI** 41C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code93UDSI** barcode to tailor Code ID for Code93 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "93", scan **3, 9, 3,** and then **3** to assign the specified hexadecimal value "3933".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-10-4. Set Length Scale

Length scale have to work collaboratively with length qualification which is illustrated in Section 8-10-2. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Code93Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Code93Len1** to **Code93Len2**. In this case, **Code93Len1** stands for the minimum and **Code93Len2** for the maximum. However, **Code93Len1, Code93Len2,** and **Code93Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Code93Len1, Code93Len2, or Code93Len3.**

**Code93Len1** 41501

**(Length: 1 digit / Range: 0-255)**

**Code93Len2** 41511

**(Length: 1 digit / Range: 0-255)**

**Code93Len3** 41521

**(Length: 1 digit / Range: 0-255)**

Enter



End

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code93Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for Code93Len2 and Code93Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-11. Code128

### 8-11-1. Enable/Disable Code128

Scan the appropriate barcode to determine whether or not to enable Code128.

Disable 43400

Enable 43401

### 8-11-2. Enable/Disable ISBT128

Scan the appropriate barcode to determine whether or not to enable ISBT 128.

Disable 43410

Enable 43411

### 8-11-3. Enable/Disable GS1-128

Scan the appropriate barcode to determine whether or not to enable GS1-128.

Disable 43420

Enable 43421

### 8-11-4. Read Tolerance

Read tolerance is associated with the device's ability of reacting to the barcodes in terms of the barcode quality. By default, read tolerance is set to **High** level, which will avoid a mishap especially when the device is decoding a crappy or damaged barcode. **Low** read

tolerance will confine the scanner to merely reading barcodes which comply with Codec 39 standards.

High 434F0

Medium 434F1

Low 434F2

## 8-11-5. Enable/Disable AIM ID for GS1-128

According to barcode symbology identifiers, **]C1** AIM identifier stands for GS1-128 barcode. **Enable** the feature to output this AIM identifier followed by the decoded message during data transmission.

Disable 43580

Enable 43581

## 8-11-6. Enable/Disable GTIN Processing

GTIN Processing serves to adapt the decoded GS1-128 barcodes to comply with GTIN-14 standards. Please be informed that it is necessary to enable GS1-128 symbology first before GTIN processing can proceed. In this case, the normal GSI-128 codes are no longer able to be decoded. Scan the appropriate barcode to determine whether or not to support GTIN processing.

Disable 43600

Enable 43601

## 8-11-7. Verify Check Digit

Checksum algorithms provide the error-detection functions. When this feature is enabled,



the device will only decode the Code128 barcodes which contain check digit to authenticate the decoded barcodes. Scan the appropriate barcode to determine whether to verify check digit.

**Disable** 434C0

**French CIP** 434C1

## 8-11-8. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-11-13** for more details about configurations of the length scale.

**Min** 43530

**Fixed** 43531

**Min/Max** 43532

## 8-11-9. Transmit AIM Identifier

AIM Identifier is a set of characters prefixed to decoded message in order to denote the symbology type. Scan the appropriate barcode to determine whether to display AIM identifier as part of transmitted barcodes.

**Disable** C6000

**Enable** C6001

## 8-11-10. Transmit Application Identifier

Application Identifier is a set of symbols used to identify the position of specific information. Scan the appropriate barcode to determine whether to display Application Identifier as part of transmitted barcodes.

**Disable** C6010

**Enable** C6011

## 8-11-11. Set Decoding Scheme for Unconventional GS1-128

Unconvetional GS1-128 is a special case which requires particular meaures to decode its message. In response to this speical symbology, a number of decoding methods is available for you to choose from:

**FNC2-appended**: When enabled, the received message containing FNC2 character. will be decoded.

**FNC4 ASCII extension:** when enabled, the data field following FNC4 character will be decoded.

The solutions described above are not mutually exclusive, so you may select more than one scheme for setting up your scanner. From the barcodes listed below Scan the appropriate one to determine the decoding scheme for unconventional GS1-128.

**None** 43430

**FNC2** 43432

**FNC4** 43434

**FNC2+FNC4** 43436

## 8-11-12. Set Separator for Code128

The group separator refers to the specified characters which aim to divide a lengthy, intangible string data into a couple of recognizable data fields. By default, the scanner will transmit **<GS>** character, equivalent to ASCII value 29, as a separator character.

**Separator** 43591

**(Length: 1 digit)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Separator** barcode to set separator value for Code128.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be 1 character in length. For instance, to use "-" to break down a Code 128 symbol into several units, scan **2** first, and then **D** to assign the specified hexadecimal value "2D".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-11-13. Set Length Scale

Length scale have to work collaboratively with length qualification which is illustrated in Section 8-11-8. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Code128Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Code128Len1** to **Code128Len2**. In this case, **Code128Len1** stands for the minimum and **Code128Len2** for the maximum. However, **Code128Len1, Code128Len2,** and **Code128Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Code128Len1, Code128Len2, or Code128Len3.**

**Code128Len1** 43501

**(Length: 1 digit / Range: 0-255)**

**Code128Len2** 43511

**(Length: 1 digit / Range: 0-255)**

**Code128Len3** 43521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code128Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for Code128Len2 and Code128Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter



End

## 8-11-14. Set Code ID for Code128

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Code128.

**Code128UDSI** 43C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code128UDSI** barcode to tailor Code ID for Code128 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "C8", scan **4, 3, 3,** and then **8** to assign the specified hexadecimal value "4338".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-11-15. Set Code ID for GS1-128

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for GS1-128.

**Code128Gs1UDSI** 43C12

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Code128Gs1UDSI** barcode to tailor Code ID for GS1-128 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be “G8”, scan **4, 7, 3,** and then **8** to assign the specified hexadecimal value “4738”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-12. Data Matrix

### 8-12-1. Enable/Disable Data Matrix

Scan the appropriate barcode to determine whether or not to enable Data Matrix.

Disable 54400

Enable 54401

### 8-12-2. Enable/Disable Mirrored Data Matrix

Scan the appropriate barcode to determine whether to support the feature of decoding mirrored Data Matrix labels.

Disable 54430

Enable 54431

### 8-12-3. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-12-5** for more details about configurations of the length scale.

Min 54530

Fixed 54531

Min/Max 54532

## 8-12-4. Set Code ID for Data Matrix

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Data Matrix.

DataMatrixUDSI 54C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **DataMatrixUDSI** barcode to tailor Code ID for Data Matrix to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "DM", scan **4, 4, 4,** and then **D** to assign the specified hexadecimal value "444D".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-12-5. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-12-3. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **DataMatrixLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **DataMatrixLen1** to **DataMatrixLen2**. In this case, **DataMatrixLen1** stands for the minimum and **DataMatrixLen2** for the maximum. However, **DataMatrixLen1, DataMatrixLen2,** and **DataMatrixLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **DataMatrixLen1, DataMatrixLen2, or DataMatrixLen3.**

**DataMatrixLen1** 54902

**(Length: 2 digits / Range: 0-65536)**

**DataMatrixLen2** 54912

**(Length: 2 digits / Range: 0-65536)**

**DataMatrixLen3** 54922

**(Length: 2 digits / Range: 0-65536)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **DataMatrixLen1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 65536. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 individually for DataMatrixLen2 and DataMatrixLen3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter



End

## 8-13. NI Post

### 8-13-1. Enable/Disable NI Post

Scan the appropriate barcode to determine whether or not to enable NIPost.

Disable 36400

Enable 36401

### 8-13-2. Set Code ID for NI Post

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for NI Post.

NIPostUDSI 36C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **NIPostUDSI** barcode to tailor Code ID for NI Post to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "NP", scan **4, 1, 5,** and then **0** to assign the specified hexadecimal value "4150".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-14. World Product Code

### 8-14-1. Enable/Disable UPC-A

Scan the appropriate barcode to determine whether or not to enable UPC-A.

**Disable** 4B400

**Enable** 4B401

### 8-14-2. Enable/Disable UPC-E

Scan the appropriate barcode to determine whether or not to enable UPC-E.

**Disable** 4B410

**Enable** 4B411

### 8-14-3. Enable/Disable EAN-13

Scan the appropriate barcode to determine whether or not to enable EAN-13.

**Disable** 4B430

**Enable** 4B431

## 8-14-4. Enable/Disable EAN-8

Scan the appropriate barcode to determine whether or not to enable EAN-8.

Disable 4B420

Enable 4B421

## 8-14-5. Convert UPC-A to EAN-13

Enable this feature to convert UPC-A labels into EAN-13 barcodes.

Disable 4B5A0

Enable 4B5A1

## 8-14-6. Transmit Check Digit for UPC-A

Scan the appropriate barcode to determine whether to transmit the check digit for UPC-A.

Disable 4B540

Enable 4B541

## 8-14-7. Enable/Disable UPC-E1

Scan the appropriate barcode to determine whether to enable UPC-E1, a variation of UPC-E.

Disable 4B4C0

Enable 4B4C1

## 8-14-8. Convert UPC-E to UPC-A

Enable this feature to convert UPC-E labels into UPC-A barcodes.

Disable 4B5B0

Enable 4B5B1

## 8-14-9. Transmit Check Digit for UPC-E

Scan the appropriate barcode to determine whether to transmit the check digit for UPC-E.

Disable 4B550

Enable 4B551

## 8-14-10. Convert EAN-13 to ISBN

Enable this feature to convert EAN-13 labels into ISBN barcodes.

Disable 4B440

Enable 4B441

## 8-14-11. Convert EAN-13 to ISMN

Enable this feature to convert EAN-13 labels into ISMN barcodes.

Disable 4B610

Enable 4B611

## 8-14-12. Convert EAN-13 to ISSN

Enable this feature to convert EAN-13 labels into ISSN barcodes.

Disable 4B620

Enable 4B621

## 8-14-13. Transmit Check Digit for EAN-13

Scan the appropriate barcode to determine whether to transmit the check digit for EAN-13.

Disable 4B570

Enable 4B571

## 8-14-14. Convert EAN-8 to EAN-13

Enable this feature to convert EAN-8 labels into EAN-13 barcodes.

Disable 4B5C0

Enable 4B5C1

## 8-14-15. Transmit Check Digit for EAN-8

Scan the appropriate barcode to determine whether to transmit the check digit for EAN-8.

Disable 4B560

Enable 4B561

## 8-14-16. Enable/Disable 2-digit Add-on Symbol

The use of Add-on symbols allows users to supplement additional information with the primary barcode data. Scan the appropriate barcode to enable or disable the 2-digit Add-on symbol.

Disable 4B450

Enable 4B451

## 8-14-17. Enable/Disable 5-digit Add-on Symbol

The use of Add-on symbols allows users to supplement additional information with the primary barcode data. Scan the appropriate barcode to enable or disable the 5-digit Add-on symbol.

Disable 4B460

Enable 4B461

## 8-14-18. Enable/Disable GTIN Processing

GTIN processing aims to process EAN/UPC barcodes and then transmit them in 14-digit GTIN format. To enable EAN/UPC codes is a prerequisite to initiate GTIN processing. Scan the appropriate barcode to determine whether to enable GTIN processing for EAN/UPC symbologies.

Disable 4B600

Enable 4B601

## 8-14-19. Set Code ID for UPC-A

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for UPC-A.

**UpcAUDSI** 4BC02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UpcAUDSI** barcode to tailor Code ID for UPC-A to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "UA", scan **5, 5, 4,** and then **1** to assign the specified hexadecimal value "5541".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-14-20. Set Code ID for UPC-E

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for UPC-E.

**UpcEUDSI** 4BC12

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UpcEUDSI** barcode to tailor Code ID for UPC-E to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "UE", scan **5, 5, 4,** and then **5** to assign the specified hexadecimal value "5545".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-14-21. Set Code ID for EAN-13

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for EAN-13.

**Ean13UDSI** 4BC32

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Ean13UDSI** barcode to tailor Code ID for EAN-13 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "13", scan **3, 1, 3,** and then **3** to assign the specified hexadecimal value "3133".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-14-22. Set Code ID for EAN-8

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for EAN-8.

Ean8UDSI 4BC22

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Ean8UDSI** barcode to tailor Code ID for EAN-8 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "E8", scan **4, 5, 3,** and then **8** to assign the specified hexadecimal value "4538".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-15. GS1 Composite

### 8-15-1. Enable/Disable Composite Code A/B

Scan the appropriate barcode to determine whether or not to enable Composite Code A/B.

Disable 56400

Enable 56401

### 8-15-2. Enable/Disable Composite Code C

Scan the appropriate barcode to determine whether or not to enable Composite Code C.

Disable 56410

Enable 56411

### 8-15-3. Transmit Linear Components

A Composite code is composed of linear components and 2D ones. **Enable** this parameter to only transmit linear components.

Disable 56440

Enable 56441

### 8-15-4. Transmit AIM Identifier

AIM Identifier is a set of characters prefixed to decoded message in order to denote the symbology type. Scan the appropriate barcode to determine whether to display AIM identifier as part of transmitted barcodes.

Disable C6000

Enable C6001

## 8-15-5. Transmit Application Identifier

Application Identifier is a set of symbols used to identify the position of specific information. Scan the appropriate barcode to determine whether to display Application Identifier as part of transmitted barcodes.

Disable C6010

Enable C6011

## 8-15-6. UPC/EAN message Decoding

Linear components and 2D components generally form the basis of Composite barcodes. In terms of barcode structures, it is necessary to specify how to deal with UPC/EAN message while the device decodes composite barcodes as a whole. **Never** barcode indicates UPC/EAN symbologies are not linked to Composite code, whereas **Always** label will always associate UPC/EAN with Composite barcode. Alternatively, scan **Auto** barcode to initiate auto-discrimination functionality which will automatically differentiate an assortment of barcodes.

Never 565E0

Always 565E1

Auto 565E2

## 8-15-7. Set Code ID for Composite Code A/B

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Composite Code A/B.

ABUDSI 56C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **ABUDSI** barcode to tailor Code ID for Composite Code A/B to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "AB", scan **4, 1, 4,** and then **2** to assign the specified hexadecimal value "4142".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-15-8. Set Code ID for Composite Code C

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Composite Code C.

CUDSI 56C12

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **CUDSI** barcode to tailor Code ID for Composite Code C to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be “CC”, scan **4, 3, 4,** and then **3** to assign the specified hexadecimal value “4343”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-16. GS1 DataBar

### 8-16-1. Enable/Disable GS1 DataBar Omnidirectional

Scan the appropriate barcode to determine whether or not to enable GS1 DataBar Omnidirectional.

Disable 4F400

Enable 4F401

### 8-16-2. Enable/Disable GS1 DataBar Limited

Scan the appropriate barcode to determine whether or not to enable GS1 DataBar Limited.

Disable 4F410

Enable 4F411

### 8-16-3. Enable/Disable GS1 DataBar Expanded

Scan the appropriate barcode to determine whether or not to enable GS1 DataBar Expanded.

Disable 4F420

Enable 4F421

## 8-16-4. Transmit AIM Identifier

AIM Identifier is a set of characters prefixed to decoded message in order to denote the symbology type. Scan the appropriate barcode to determine whether to display AIM identifier as part of transmitted barcodes.

**Disable** C6000

**Enable** C6001

## 8-16-5. Transmit APP Identifier

Application Identifier is a set of symbols used to identify the position of specific information. Scan the appropriate barcode to determine whether to display Application Identifier as part of transmitted barcodes.

**Disable** C6010

**Enable** C6011

## 8-16-6. Set Code ID for GS1 DataBar Omnidirectional

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for GS1 DataBar Omnidirectional.

**OmniUDSI** 4FC02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **OmniUDSI** barcode to tailor Code ID for GS1 DataBar Omnidirectional to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Om", scan **4, F, 6,** and then **D** to assign the specified hexadecimal value "4F6D".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-16-7. Set Code ID for GS1 DataBar Limited

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for GS1 DataBar Limited.

**LimitUDSI** 4FC12

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **LimitUDSI** barcode to tailor Code ID for GS1 DataBar Limited to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "GL", scan **4, 7, 4,** and then **C** to assign the specified hexadecimal value "474C".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-16-8. Set Code ID for GS1 DataBar Expanded

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for GS1 DataBar Expanded.

**ExpandUDSI** 4FC22

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **ExpandUDSI** barcode to tailor Code ID for GS1 DataBar Expanded to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "GE", scan **4, 7, 4,** and then **5** to assign the specified hexadecimal value "4745".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-17. Info Mail

### 8-17-1. Enable/Disable Info Mail

Scan the appropriate barcode to determine whether or not to enable Info Mail.

Disable 39400

Enable 39401

### 8-17-2. Set Code ID for Info Mail

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Info Mail.

InfoMailUDSI 39C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **InfoMailUDSI** barcode to tailor Code ID for Info Mail to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "IM", scan **4, 9, 4,** and then **D** to assign the specified hexadecimal value "494D".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-18. Intelligent Mail

### 8-18-1. Enable/Disable Intelligent Mail

Scan the appropriate barcode to determine whether or not to enable Intelligent Mail.

Disable 3A400

Enable 3A401

### 8-18-2. Set Code ID for Intelligent Mail

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Intelligent Mail.

IntMailUDSI 3AC02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **IntMailUDSI** barcode to tailor Code ID for Intelligent Mail to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "IM", scan **4, 9, 4,** and then **D** to assign the specified hexadecimal value "494D".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-19. Interleave25

### 8-19-1. Enable/Disable Interleave25

Scan the appropriate barcode to determine whether or not to enable Interleave25.

Disable 44400

Enable 44401

### 8-19-2. Read Tolerance

Read tolerance is associated with the device's ability of reacting to the barcodes in terms of the barcode quality. By default, read tolerance is set to **High** level, which will avoid a mishap especially when the device is decoding a crappy or damaged barcode. **Low** read tolerance will confine the scanner to merely reading barcodes which comply with Codec 39 standards.

High 444F0

Low 444F2

### 8-19-3. Configure Checksum Type

Scan the appropriate barcode to determine whether or not to enable the checksum algorithm. While the feature is enabled, the device will decode barcodes which contain check digit and further detect if an error occurs during the decoding process.

Disable 444C0

Mod 10 444C1

French CIP HR 444C2

Case Code 444C3

## 8-19-4. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 44540

Enable 44541

## 8-19-5. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-19-7** for more details about configurations of the length scale.

Min 44530

Fixed 44531

Min/Max 44532

## 8-19-6. Set Code ID for Interleave25

A user-defined Code ID functions as an identity for a specific barcode type to be

differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Interleave25.

UDSI 44C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Interleave25 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "25", scan **3, 2, 3,** and then **5** to assign the specified hexadecimal value "3235".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-19-7. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-19-5. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Interleave25Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Interleave25Len1** to **Interleave25Len2**. In this case, **Interleave25Len1** stands for the minimum and **Interleave25Len2** for the maximum. However, **Interleave25Len1, Interleave25Len2,** and **Interleave25Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Interleave25Len1, Interleave25Len2, or Interleave25Len3.**

**Interleave25Len1** 44501

**(Length: 1 digit/ Range: 0-255)**

**Interleave25Len2** 44511

**(Length: 1 digit/ Range: 0-255)**

**Interleave25Len3** 44521

**(Length: 1 digit/ Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 individually for Len2 and Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter

255

End

## 8-20. JP Post

### 8-20-1. Enable/Disable JP Post

Scan the appropriate barcode to determine whether or not to enable Interleave25.

Disable 35400

Enable 35401

### 8-20-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 35540

Enable 35541

### 8-20-3. Set Code ID for JP Post

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for JP Post.

UDSI 35C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for JP Post to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "JP", scan **4, A, 5,** and then **0** to assign the specified hexadecimal value "4A50".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-21. Matrix 25

### 8-21-1. Enable/Disable Matrix 25

Scan the appropriate barcode to determine whether or not to enable Matrix 25.

Disable 45400

Enable 45401

### 8-21-2. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**;** **Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-21-4** for more details about configurations of the length scale.

Min 45530

Fixed 45531

Min/Max 45532

## 8-21-3. Set Code ID for Matrix 25

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Matrix 25.

UDSI 45C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Matrix 25 to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "25", scan **3, 2, 3,** and then **5** to assign the specified hexadecimal value "3235".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-21-4. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-21-2. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **Matrix25Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length



has to fall within the range of **Matrix25Len1** to **Matrix25Len2**. In this case, **Matrix25Len1** stands for the minimum and **Matrix25Len2** for the maximum. However, **Matrix25Len1, Matrix25Len2,** and **Matrix25Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Matrix25Len1, Matrix25Len2, or Matrix25Len3.**

**Matrix25Len1** 45501

**(Length: 1 digit / Range: 0-255)**

**Matrix25Len2** 45511

**(Length: 1 digit / Range: 0-255)**

**Matrix25Len3** 45521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Matrix25Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for Matrix25Len2 and Matrix25Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-22. MaxiCode

### 8-22-1. Enable/Disable MaxiCode

Scan the appropriate barcode to determine whether or not to enable MaxiCode.

Disable 52400

Enable 52401

### 8-22-2. Set Code ID for MaxiCode

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for MaxiCode.

UDSI 52C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for MaxiCode to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "MX", scan **4, D, 5,** and then **8** to assign the specified hexadecimal value "4D58".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-23. MSI

### 8-23-1 Enable/Disable MSI

Scan the appropriate barcode to determine whether or not to enable MSI.

Disable 46400

Enable 46401

### 8-23-2 Configure Checksum Type

Scan the appropriate barcode to determine whether or not to enable the checksum algorithm. While the feature is enabled, the device will decode barcodes which contain check digit and further detect if an error occurs during the decoding process.

Disable 464C0

Mod 10 464C1

Mod 10/Mod 10 464C2

Mod 11/Mod 11 464C3

### 8-23-3 Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 46540

Enable 46541

## 8-23-4 Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-23-6** for more details about configurations of the length scale.

Min 46530

Fixed 46531

Min/Max 46532

## 8-23-5 Set Code ID for MSI

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for MSI.

UDSI 46C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for MSI to your needs.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "MI", scan **4, D, 4,** and then **9** to assign the specified hexadecimal value "4D49".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-23-6 Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-23-4. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **MsiLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **MsiLen1** to **MsiLen2**. In this case, **MsiLen1** stands for the minimum and **MsiLen2** for the maximum. However, **MsiLen1, MsiLen2,** and **MsiLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **MsiLen1, MsiLen2, or MsiLen3.**

**MsiLen1** 46501

**(Length: 1 digit / Range: 0-255)**

**MsiLen2** 46511

**(Length: 1 digit / Range: 0-255)**

**MsiLen3** 46521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **MsiLen1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value “8”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 individually for MsiLen2 and MsiLen3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-24. PDF417

### 8-24-1. Enable/Disable PDF417

Scan the appropriate barcode to determine whether or not to enable PDF417.

Disable 4C400

Enable 4C401

### 8-24-2. Enable/Disable Micro PDF417

Scan the appropriate barcode to determine whether or not to enable Micro PDF417.

Disable 4C420

Enable 4C421

### 8-24-3. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 4C5F0

Enable 4C5F1

### 8-24-4. Set Code ID for PDF417

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for PDF417.

UDSI 4CC02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for PDF417 to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "PF", scan **5, 0, 4,** and then **6** to assign the specified hexadecimal value "5046".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-24-5. Set Code ID for Micro PDF 417

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Micro PDF417.

MicroUDSI 4CC12

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **MicroUDSI** barcode to tailor Code ID for Micro PDF417 to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "MP", scan **4, D, 5,** and then **0** to assign the specified hexadecimal value "4D50".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-25. PLANET

### 8-25-1. Enable/Disable PLANET

Scan the appropriate barcode to determine whether or not to enable PLANET

Disable 31400

Enable 31401

### 8-25-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 31540

Enable 31541

### 8-25-3. Set Code ID for PLANET

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for PLANET.

UDSI 31C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for PLANET to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be “PT”, scan **5, 0, 5,** and then **4** to assign the specified hexadecimal value “4D50”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-26. Plessey

### 8-26-1. Enable/Disable Plessey

Scan the appropriate barcode to determine whether to enable Plessey.

Disable 47400

Enable 47401

### 8-26-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 47540

Enable 47541

### 8-26-3. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-26-5** for more details about configurations of the length scale.

Min 47530

Fixed 47531

Min/Max 47532

## 8-26-4. Set Code ID for Plessey

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Plessey.

UDSI 47C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Plessey to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Py", scan **5, 0, 7,** and then **9** to assign the specified hexadecimal value "5079".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-26-5. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-26-3. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **PlesseyLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **PlesseyLen1** to **PlesseyLen2**. In this case, **PlesseyLen1** stands for the minimum and **PlesseyLen2** for the maximum. However, **PlesseyLen1, PlesseyLen2,** and **PlesseyLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **PlesseyLen1, PlesseyLen2, or PlesseyLen3.**

Enter



End

PlesseyLen1 47501

(Length: 1 digit / Range: 0-255)

PlesseyLen2 47511

(Length: 1 digit / Range: 0-255)

PlesseyLen3 47521

(Length: 1 digit / Range: 0-255)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **PlesseyLen1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 2 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Step 2-4 for PlesseyLen2 and PlesseyLen3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-27. POSTNET

### 8-27-1. Enable/Disable POSTNET

Scan the appropriate barcode to determine whether or not to enable POSTNET.

**Disable** 30400

**Enable** 30401

### 8-27-2. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

**Disable** 30540

**Enable** 30541

### 8-27-3. Set Code ID for POSTNET

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for POSTNET.

**UDSI** 30C02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for POSTNET to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "PN", scan **5, 0, 4,** and then **E** to assign the specified hexadecimal value "504E".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-28. QR Code

### 8-28-1. Enable/Disable QR Code

Scan the appropriate barcode to determine whether or not to enable QR Code

Disable 55400

Enable 55401

### 8-28-2. Enable/Disable Micro QR Code

Scan the appropriate barcode to determine whether to enable Micro QR Code

Disable 55440

Enable 55441

### 8-28-3. Enable/Disable QR Code Model 1

Scan the appropriate barcode to determine whether or not to enable QR Code Model 1.

Disable 55410

Enable 55411

### 8-28-4. Enable/Disable Inversed QR Code

This parameter determines whether to support decoding of inversed QR code. By default, the scanner is simply able to read normal QR code, a dark barcode in contrast with its bright background. As to Inversed QR code which is printed in lighter color on a darker

background, scan **Inverse** barcode to enable its decoding. Otherwise, scan **Auto** to support both Normal QR code and Inversed QR code.

Normal 55420

Inverse 55421

Auto 55422

## 8-28-5. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-28-7** for more details about configurations of the length scale.

Min 55530

Fixed 55531

Min/Max 55532

## 8-28-6. Set Code ID for QR Code

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for QR Code.

UDSI 55C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for QR Code to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "QR", scan **5, 1, 5,** and then **2** to assign the specified hexadecimal value "5152".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-28-7. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-28-5. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **QrCodeLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **QrCodeLen1** to **QrCodeLen2**. In this case, **QrCodeLen1** stands for the minimum and **QrCodeLen2** for the maximum. However, **QrCodeLen1, QrCodeLen2,** and **QrCodeLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **QrCodeLen1, QrCodeLen2, or QrCodeLen3.**

QrCodeLen1 55902

(Length: 1 digit / Range: 0-255)

QrCodeLen2 55912

(Length: 1 digit / Range: 0-255)

QrCodeLen3 55922

(Length: 1 digit / Range: 0-255)

Enter



End

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **QrCodeLen1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 for QrCodeLen2 and QrCodeLen3, if necessary.

(6) Scan **End** barcode to complete the configuration.

## 8-29. Industrial 25

### 8-29-1. Enable/Disable Industrial 25

Scan the appropriate barcode to determine whether or not to enable Industrial 25

Disable 48400

Enable 48401

### 8-29-2. Configure Checksum Type

Scan the appropriate barcode to determine whether or not to enable the checksum algorithm. While the feature is enabled, the device will decode barcodes which contain check digit and further detect if an error occurs during the decoding process.

Disable 484C0

Mod 10 484C1

### 8-29-3. Transmit Check Digit

Scan the appropriate barcode to determine whether to transmit the check digit.

Disable 48540

Enable 48541

### 8-29-4. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the



barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-29-6** for more details about configurations of the length scale.

Min 48530

Fixed 48531

Min/Max 48532

## 8-29-5. Set Code ID for Industrial 25

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from others. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Industrial 25.

UDSI 48C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Industrial 25 to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "25", scan **3, 2, 3,** and then **5** to assign the specified hexadecimal value "3235".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-29-6. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-29-4. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select,

length variables can have different meanings. With **Min** length condition, **Industrial25Len1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **Industrial25Len1** to **Industrial25Len2**. In this case, **Industrial25Len1** stands for the minimum and **Industrial25Len2** for the maximum. However, **Industrial25Len1, Industrial25Len2,** and **Industrial25Len3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the length which agrees with **Industrial25Len1, Industrial25Len2, or Industrial25Len3.**

**Industrial25Len1** 48501

**(Length: 1 digit / Range: 0-255)**

**Industrial25Len2** 48511

**(Length: 1 digit / Range: 0-255)**

**Industrial25Len3** 48521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Industrial25Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified value “8”.

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 individually for Industrial25Len2 and Industrial25Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter



End

## 8-30. Sweden Post

### 8-30-1. Enable/Disable Sweden Post

Scan the appropriate barcode to determine whether or not to enable Sweden Post.

Disable 37400

Enable 37401

### 8-30-2. Set Code ID for Sweden Post

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from other codes. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Sweden Post.

UDSI 37C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Sweden Post to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "SP", scan **5, 3, 5,** and then **0** to assign the specified hexadecimal value "5350".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-31. Telepen

### 8-31-1. Enable/Disable Telepen

Scan the appropriate barcode to determine whether or not to enable Telepen.

Disable 49400

Enable 49401

### 8-31-2. Configure Output Format

Scan the appropriate barcode to determine the output format for Telepen codes. Scan **ASCII** to transmit decoded message in ASCII format whereas read **Numeric** to decode the barcode in the numeric form.

ASCII 49580

Numeric 49581

### 8-31-3. Configure Length Qualification

With length qualification the scanner will filter out the inappropriate barcodes whose lengths are out of range. Scan **Min** barcode to specify the minimum length which the valid code at least has to be; **Fixed** barcode requires the scanned code length to necessarily agree with certain fixed number**; Min/Max** barcode is to confirm whether the barcode length falls in between maximum and minimum. However, to make this parameter work effectively, you have to configure the length scale simultaneously. Please refer to **Section 8-31-5** for more details about configurations of the length scale.

Min 49530

Fixed 49531

Min/Max 49532

## 8-31-4. Set Code ID for Telepen

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from other codes. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for Telepen.

UDSI 49C02

(Length: 2 digits)

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for Telepen to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "Tp", scan **5, 4, 7,** and then **0** to assign the specified hexadecimal value "5470".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

## 8-31-5. Set Length Scale

Length scale variables have to work collaboratively with length qualification which is illustrated in Section 8-31-3. For the reason, three length variables are available for you to further associate with the desired values. Depending on the type of qualification you select, length variables can have different meanings. With **Min** length condition, **TelepenLen1** variable represents the minimum size to limit the minimum length of a valid barcode. On the other hand, with **Min/Max** length condition, the barcode will be decoded only if its length has to fall within the range of **TelepenLen1** to **TelepenLen2**. In this case, **TelepenLen1** stands for the minimum and **TelepenLen2** for the maximum. However, **TelepenLen1, TelepenLen2,** and **TelepenLen3** can also represent a group of length limits when **Fixed** length qualification is chosen. It means the scanner will only decode the barcode with the



length which agrees with **AztecLen1L, AztecLen2L, or AztecLen3L.**

**TelepenLen1** 49501

**(Length: 1 digit / Range: 0-255)**

**TelepenLen2** 49511

**(Length: 1 digit / Range: 0-255)**

**TelepenLen3** 49521

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **Len1** barcode to determine the value of the length variable.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan decimal value barcodes representing the desired number in the range of 0 to 255. For instance, to set its length to be 8, then scan **8** to assign the specified value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Repeat Steps 2-4 individually for Len2 and Len3, if necessary.

(6) Scan **End** barcode to complete the configuration.

Enter



End

## 8-32. TLC 39

### 8-32-1. Enable/Disable TLC 39

Scan the appropriate barcode to determine whether to enable TLC 39.

Disable 4E400

Enable 4E401

### 8-32-2. Set Security Level for TLC 39

This parameter allows you to define the level of security for TLC 39. The device will decode the message according to the security level you specify when detecting the ECI number in the TLC 39 barcode. The higher security level will lead to a slower decoding.

ECISecurity 4E471

**(Length: 1 digit / Range: 0-255)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **ECISecurity** barcode to configure Security Level for TLC 39.

(3) Please refer to Decimal/Hexadecimal Table in the appendix to scan desired decimal value barcodes representing the desired number in the range from 0 to 255. For instance, to set the security level to be 8, then scan **8** to assign the specified decimal value "8".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

Enter



End

## 8-32-3. Set Code ID for TLC 39

A user-defined Code ID functions as an identity for a specific barcode type to be differentiated from other codes. It is especially helpful while you are dealing with more than one type of barcodes at the same time. Scan the barcode below to customize your own Code ID for TLC 39.

**UDSI** 4EC02

**(Length: 2 digits)**

**Procedure**

(1) Scan **Enter** barcode.

(2) Scan **UDSI** barcode to tailor Code ID for TLC 39 to your needs, if necessary.

(3) Please refer to ASCII Code Table and Decimal/Hexadecimal Table in the appendix to scan hexadecimal value barcodes representing the desired string which has to be at most 2 characters in length. For instance, to set its Code ID to be "39", scan **3, 3, 3,** and then **9** to assign the specified hexadecimal value "3339".

(4) Scan **SET** barcode to complete the variable-binding operation.

(5) Scan **End** barcode to complete the configuration.

# Appendix A

## Decimal/ Hexadecimal Table

0 %00

1 %01

2 %02

3 %03

4 %04

5 %05

6 %06

7 %07

8 %08

9 %09

A %0A

B %0B

C %0C

D %0D

E %0E

F %0F

## Validate your configurations

SET %OK

# Appendix A

## ASCII Code Table

| H / L | 0(*) | 1(*) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|
| **0** | Null | | NUL | DLE | SP | 0 | @ | P | ` | p |
| **1** | Up | F1 | SOH | DC1 | ! | 1 | A | Q | a | q |
| **2** | Down | F2 | STX | DC2 | " | 2 | B | R | b | r |
| **3** | Left | F3 | ETX | DC3 | # | 3 | C | S | c | s |
| **4** | Right | F4 | EOT | DC4 | $ | 4 | D | T | d | t |
| **5** | PgUp | F5 | ENQ | NAK | % | 5 | E | U | e | u |
| **6** | PgDn | F6 | ACK | SYN | & | 6 | F | V | f | v |
| **7** | | F7 | BEL | ETB | ' | 7 | G | W | g | w |
| **8** | Bs | F8 | BS | CAN | ( | 8 | H | X | h | x |
| **9** | Tab | F9 | HT | EM | ) | 9 | I | Y | i | y |
| **A** | | F10 | LF | SUM | * | : | J | Z | j | z |
| **B** | Home | Esc | VT | ESC | + | ; | K | [ | k | { |
| **C** | End | F11 | FF | FS | , | < | L | \ | l | \| |
| **D** | Enter | F12 | CR | GS | - | = | M | ] | m | } |
| **E** | Insert | Ctrl+ | SO | RS | . | > | N | ^ | n | ~ |
| **F** | Delete | Alt+ | SI | US | / | ? | O | _ | o | DEL |

Note: (*) for keyboard wedge only.

# Appendix B

## Test Chart

### UPC-A


### EAN-13 with Add-on 5


(ISBN: 9572216678)

### Code-39


(Full ASCII Code: *CODE39 Test*)

### Interleaved 2 of 5


### Code-93

# Appendix B

## Code-128

0123456789e
(UCC/EAN-128: ]C10123456789e)

## Codabar/NW7

C98765D D43210A

## MSI/Plessey

10558302 5

## CODE-11

8862647779733

## UK/Plessey

16520003546 1

## Telepen

TELEPEN Test+
(Numeric: 57424942534251055774888916)