

Robin RS 1100 Scanner



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## **Revision History**

Changes to the original manual are listed below:

| Revrsion | Description   | Change Date |
|----------|---|-------------|
| Ver 1.0  | Initial Version   | 2011-12-25  |
| Ver 1.1  | Modify text mistakes, Adjust the format of Start/Exit Setup | 2012-08-10  |

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# **Preface**

## Introduction

This manual provides information about using the NLS-HR15 series 1D barcode corded scanner: NLS-HR15XX-3E. (Hereinafter refer to as "HR15 corded scanner")

# **Chapter Descriptions**

| <b></b>    | Chapter1,Getting Started          | :Generaldescription of HR15 corded scanner includeding all the parameters of HR15 corded scanner. |
|------------|-----------------------------------|---|
| ٨          | 06                                | This should be seen the most had a file out a set the LIDAS and advanced                          |
| $\diamond$ | Chapter2, General Configuration   | : This chapter introduces the method of how to set the HR15 corded scanner.                       |
|            |                                   | There are two methods, setup barcode and setup command.   |
| <b></b>    | Chapter3, Inquiry Command         | : This chapter introduces how to inquiry and obtain the information of HR15                       |
|            |                                   | corded scanner by scanning the setup barcode.   |
| <b></b>    | Chapter4, Communication Setup     | : Serial port parameter setup and USB function setup have been introduced                         |
|            |                                   | in this chapter.  |
| <b></b>    | Chapter5, Data Format             | : Introduces how to use the prefix and suffix to satisfy the customers'                           |
|            |                                   | requirement to obtaining more barcode data.   |
| <b></b>    | Chapter6, Barcode Parameter Setup | : In this chapter, all the barcodes which HR15 scanner supports have been                         |
|            |                                   | listed, and the revelant parameter setup barcodes have been provided.                             |

#### **Document Set**

The documentation set for the NLS-HR15 corded scanner provides information for specific user needs and includes:

NLS-HR15XX-3E Quick Start Guide
 Description how to get the HR15 corded scanner up and basic operation.
 This is the manual, description how to use and set the HR15 corded scanner.
 Software Utilities User Guide
 Description how to use the Newland's scanner utilities software developed

ool.

# **Chapter 1 Getting Started**

#### Introduction

HR15 corded scanner is a type of 1D barcode scanner with excellent performance, except for all the normal 1D barcode, it also

can read the stacked 2D barcode such as PDF417 and the MicroPDF17. Based on the self-independent technology robin, HR15 corded scanner is able to perform rapid image acquisitionand and accurate decoding; it can provide the customers with best service. HR15 corded scanner is designed in accordance with the human engineering, which makes it easier and .more comfortable to use

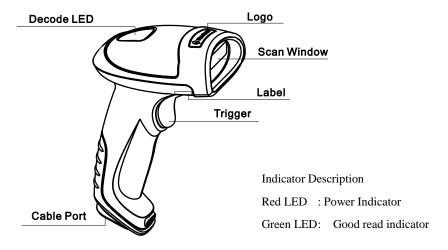
The introduction of how to use the HR15 corded scanner is included in this chapter with several pictures, if your have a HR15 corded scanner in your hand, please compare the real scanner with this manual, which will help you to understand this manulbetter. This chapter is applicable to normal users, maintenance staff and software developer.

## Unpacking

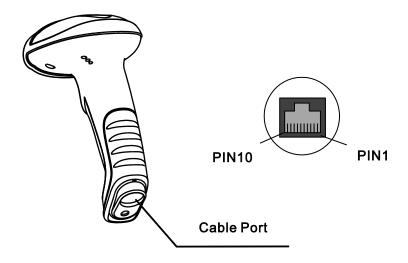
Open the package and take out HR15 corded scanner and its accessories. Please check the completeness of all the items according to the package list, and make sure there are no damaged parts. If any contents are damaged or missing, please keep the original package and contact your dealer immediately for after-sale service.

#### **Product OverView**

The main parts of HR15 are shown in the following picture



# Interface



Pin assigmentDefinition 1 of HR15 connector (factory default)

| PIN | Definition | Туре | Description           |
|-----|------------|------|-----------------------|
| 1   | NC         | •    | Null                  |
| 2   | NC         | -    | Null                  |
| 3   | VCC        | Р    | Power : +5V           |
| 4   | TXD        | 0    | RS232 Output          |
| 5   | RXD        | I    | RS232 Input           |
| 6   | CTS        | I    | Stream Control Signal |
| 7   | RTS        | 0    | Stream Control Signal |
| 8   | GND        | Р    | Ground                |
| 9   | D-         | I/O  | LISP Signal           |
| 10  | D+         | I/O  | USB Signal            |

Pin assigmentDefinition 2 of HR15 connector

| PIN | Definition | Type | Description           |
|-----|------------|------|-----------------------|
| 1   | CLK1       | I/O  | Keyboard Clock Signal |
| 2   | DATA1      | I/O  | Keyboard Data Signal  |
| 3   | VCC        | Р    | Power : +5V           |
| 4   | TXD        | 0    | RS232 Output          |
| 5   | RXD        | I    | RS232 Input           |
| 6   | CLK2       | I/O  | PC Clock Signal       |
| 7   | DATA2      | I/O  | PC Keyboard Signal    |
| 8   | GND        | Р    | Ground                |
| 9   | D-         | I/O  | LICE Cianal           |
| 10  | D+         | I/O  | USB Signal            |

# **Communication Port**

HR15 must be connected with a host for further operation, such as PC, POS.or any intelligent terminal with USB, RS232 or PS/2 interface.

♦ USB



♦ RS232

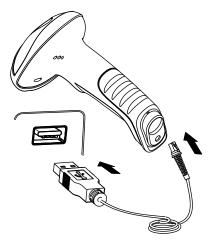


#### 



Please check the port on the host and purchase the right cable.

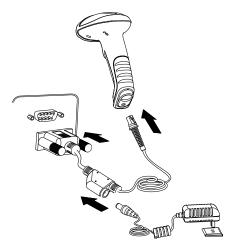
## **UsingUSB Cable**



Connecting the HR15 corded scanner with host through USB cable:

- 1 Plug the RJ45 connector into HR15 scanner.
- 2 Plug the USB connector into Host.

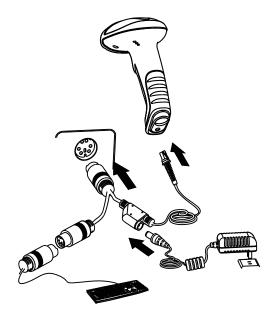
# **Using RS232 Cable**



Connecting the HR15 corded scanner with host through RS232 cable:

- 1 Plug the RJ45 connector into HR15 scanner.
- 2 Plug the RS232 connector into Host.
- 3 Connect the RS232 cable with power adapter.

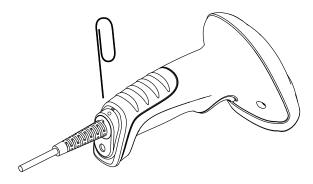
## Using PS/2 Cable



Only the HR15XX-33 corded scanner support the PS/2 interface,

- 1 Plug the RJ45 connector into HR15 scanner.
- 2 Plug the PS/2 connector into Host.
- 3 If necessary, please connect the PS/2 cable with power adapter.
- 4 If necessary, please connect the normal keyboard with PS/2 cable.

## **Remove the Communication Cable**



Follow the figure instruction, use a paper clip or spicule to push into the disassemble hole to remove the cable from HR15.

- 1 Please remove the power adapter first, if use RS232 or PS/2 cable connects with.
- 2 Insert and push the spicule into the disassemble hole.
- 3 Pull out the cable and remove the spicule form the hold.

# Power-on, Power-off, Sleep, Reboot

#### Power-on

Connect the HR15 with the host, the HR15 will power on automatically (factory default).

#### Power-off

There is three ways to turn off the scanner:

- ♦ Remove the cable connected from the HR15.
- Remove the cable connected from the Host PC.
- ♦ Remove the power adapter connected from the RS232 cable.

#### Sleep

The scanner will become into sleep mode if no scanning is carried out in a period of time.

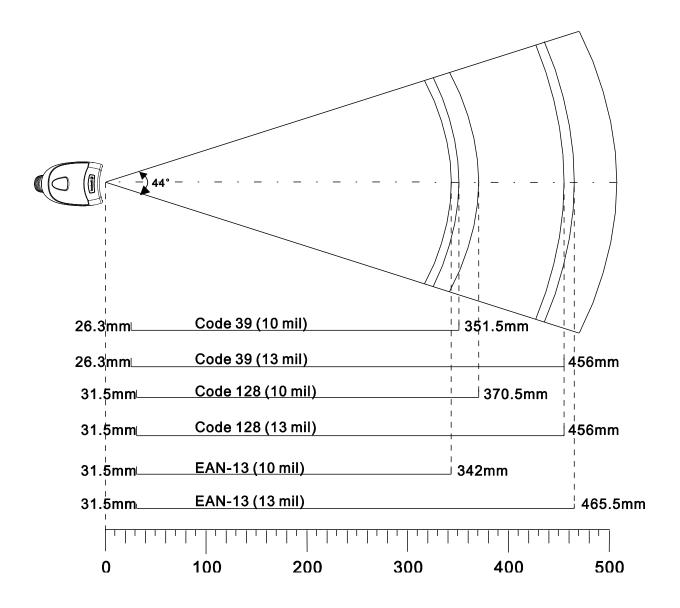
#### Reboot

If the HR15 no response or abnormal, please pull out the cable from Host PC then plug again to reboot the HR15.

## **Reading Window Maintenance**

- ♦ The scanning window should keep clean.
- Avoid hard and rough objects to clean the reading window that will easy to cause the damage or scratch.
- ♦ Use soft brush to remove the stain on the scanning window.
- Please use the soft cloth to clean the window, such as glassed cleaning cloth.
- It is prohibited to spray liquid on the scanning window.
- ♦ It is prohibited to use any detergent except for water.

# **Reading Depth of Field**



# **Specification**

| Performance  |  |
|--|--|
| Light Source                                       | 620nm Visible Red LED  |
| Scan Pattern                                       | CCD linear image   |
| Oddi i ditorii                                     | ·  |
| Symbologies  | Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5,   |
|  | ISBN, Code 93, UCC/EAN-128, GS1 Databar, PDF417, MicroPDF417, etc.   |
| Resolution   | ≥ 4 mil  |
| Scan Angle   | 44°  |
| Reading Angle                                      | 44 °   |
| Scan Rate  | 300 scans per second   |
| Minimum Symbol Contrast                            | 20%  |
| Reminder   | Beep and LED indicator   |
| Interface  | RS-232, USB 1.1, PS2   |
| Mechanical   |  |
| Dimensions of Scanner(L x W x H)                   | 113.5 x 73 x 159 mm  |
| Dimensions of Cradle(L x W x H)                    | 195 x 82.5 x 47 mm   |
| Weight of Corded Scanner                           | 152 g  |
| Reminder   | Beep and LED indicator   |
| Power Adaptor                                      | Output: DC5V, ≥1.5A, Input: AC 100~240V, 50~60Hz   |
| Environmental                                      |  |
| One wation Tamana water                            | 1000 - 5000 (1105 - 10005)   |
| Operation Temperature                              | -10°C to 50°C (14°F to 122°F)  |
| Storage Temperature                                | -10°C to 50°C (14°F to 122°F) -20°C to 60°C (-4°F to 140°F)  |
|  |  |
| Storage Temperature                                | -20°C to 60°C (-4°F to 140°F)  |
| Storage Temperature Humidity                       | -20°C to 60°C (-4°F to 140°F) 5% ~ 95% (non-condensing)  |
| Storage Temperature Humidity Static Discharge      | -20°C to 60°C (-4°F to 140°F)  5% ~ 95% (non-condensing)  ±12 kV (Air discharge), ±8 kV (Direct discharge)                         |
| Storage Temperature Humidity Static Discharge Drop | -20°C to 60°C (-4°F to 140°F)  5% ~ 95% (non-condensing)  ±12 kV (Air discharge), ±8 kV (Direct discharge)  1.5 m drop to concrete |

FCC Part15 Class B, CE EMC Class B, CCC

#### Test condition:

Code39, Data length=3bytes,Minimum space width=10mil, Width radio=2.5:1, PCS=0.8, Barcode height=11mm, Testing distance=120mm,Envirmenttemperature = $23^{\circ}$ C, Envirment light Illumination = 200 LUX

# Overview

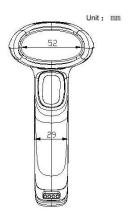
#### **Left View**

The picture below is the left view of HR15 scanner.



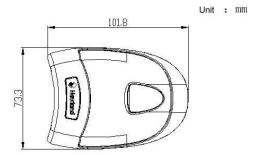
## **Front View**

The picture below is the front view of HR15 scanner.



#### **Vertical View**

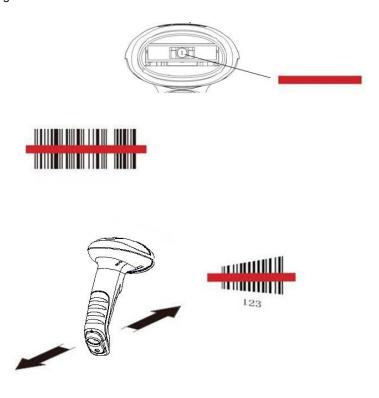
The picture below is the vertical view of HR15 scanner.



## **Barcode Reading**

- ♦ Make sure the scanner, data cable and power are properly connectedbefore turn on the power.
- ❖ Pressing the trigger to activate the illumination light, then the red illuminating line will appear.
- ❖ For the same batch of barcode, the scanner will keep a very high success ratio in certain distance, which can be regarded as the optimal scanning distance.order to find the optimal scanning distance.
- ♦ When the scanner respond with a beep and the red illuminating line goes off, it means the barcode reading is successful, and the scanner will send the data to the host.

Note: For the same batch of barcode, the scanner will keep a very high success ratio in certain distance, which can be regared as the optimal scanning distance.





# **Chapter 2 General Configuration**

#### Introduction

There are two ways to setup the barcode engine.

#### **Setting Barcode**

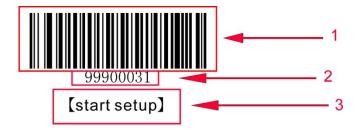
To used reading a series of special barcode to setting the barcode engine. In the following sections, we will introduce the available set of options and features and provide a corresponding setting code.

#### **Setting Command**

To used PC to send the setting command string to setting the barcode engine. In the following chapters, in addition to setting code, we will introduce the setting of the command string.

Notice: All the setting command will keep in barcode engine except a few temporary setting commands will disappear after reboot or power off.

## Format of Setup Barcode



This is the sample of setup barcode.

The setup barcode label is consisted of three parts:

- 1 · The barcode portion of the setup barcode.
- 2 \ The command description or code string of corresponding to the setup barcode.
- 3. The name of the setup barcode or function, such as the function of turn off setup code.





Use the Setting Barcodes

- The setup function will be activated by reading the "Start Setup" barcode. The procedure of configurating can be done by reading more than one setup barcodes.
- ❖ If any itme or function needs more parameters, such as check byte, please see the last section in this chapter.
- ❖ The current settingcommand can be send to the host. According to the factory default setting is not able to send the current setting command to the host. By scanning the barcode: "Send the setting command", the scanner will enable the function to send the setting command to the host.
- ♦ The start setup function is activated in the fartory default setting. Only a small possibility that the data barcode is the same with the settingcommand, thus,it is not necessary to scan the "Exit Setup" barcode to close the setup mode, to keep it will not effect the normal operation.
- Some functions may adjust the working parameters; the numeric system of parameter is decimal or hexadecimal, these values are entered by setting barcodes. The data code in the appendix includes all the necessary numerical values.
- ❖ In the default mode, the scanner will not send the current settingcommand to the host; in case of a special need, the customer can set the scanner tosend the setting command to the host. The function of setup will not be affected whether the setting command are sending or not. But the setup of "Send the setting command" is only temporarily effective; the scanner will restore to the state of "do not send the setting command" after reboot or power-off.



[Send the SettingCommand]



[Do not Send the SettingCommand]

## **Use the Setup Command**

The setup command is based on the communication serial port; it is meant to use the visible characters from 0x20 to 0x7D to describe all the content.

#### **Setup State**

When the function setup is carried out through serial communication mode, the device must be set into the "setup state"; in such state, the device only accept, process and respond the command from serial communication.

By sending a specified command can let the device enter to the set state. In the setup state to sending the specified command also allows to exit, the device will self exit from the setup state within 5 seconds did not received any new





command.

#### **Setup Protocol**

- Enter to setup state: To send"\$\$\$\$"to the scanner, reply"@@@@" when success.
- 2. Exit fromsetup state: To send"%%%%" to the scanner, reply"^^^^"when success.
- 3. If you received "^^^" reply from scanner, that mean the scanner was exit from setup state.
- 4. The format of command is to add" # "in front of each command, and end by"; ". For example: "#99900030;".
- 5. The scanner will reply a success message, by add "!" in front of setting command and end by ";".

For example: "!99900030;".

6. The scanner also will reply anerror message, by add "?" in front of setting command and end by ";".

For example: "?99900030;"

7. The scanner will reply "!xxxxxxxx;" and contains in "&{" and "}" the query results, when you sending a query command. For example:

Sending "#99900301;" query command for asking the firmware version.

Received "!99900301;&{Firmware v1.7.5;Decoder v1.00.023.C6;|FD25430B}".

#### Description:

The "Firmware v1.7.5; Decoder v1.00.023.C6; FD25430B" among in "&{" and "}" is the query results. And "FD25430B" is the data string CRC32 checksum value.

By definition, if the feedback may contain the invisible character, it will be shown as hexadecimal characters, every two characters indicate one character value. Such as:

- 8. If the setting command contains parameters, then the command will be combined according to the command system definition.

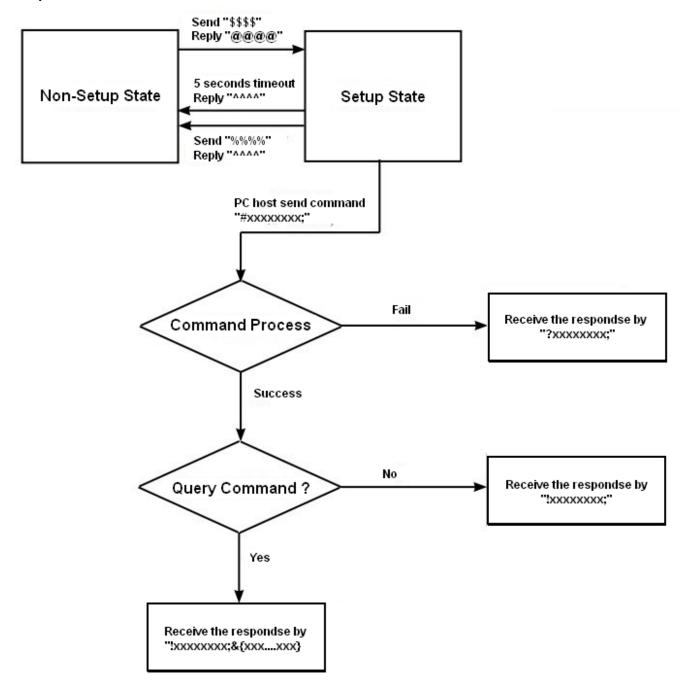
For example: The combined command string which is stop by 0x0D and 0x0A. The combined sending commands are: "#99904112;#9990000;#99900015;#99900000;#99900012;#99900020;".

99900032



[Start Setup]

#### **SetupProcess Flow**







[Start Setup]

## **Default Setup**

### **Factory Default Setting**

All the scanners have the factory default setting, by reading the "Restore to Factory Default" barcode, the scanner will restore the factory default.



[Restore to Factory Default]

#### **Work Mode Selection**



[Power Off]



[Reboot]



[Test mode]

#### Note:

- Wake up the scanner please pressing trigger.
- The work mode is a temporarily setting, the device will restore to the previous mode after reboot or power off.

# **Reading Mode**

#### **Manual Scanning Mode**

Default setting, the scanner will begin to read the barcode after the trigger is pressed, it will stop after successful reading or if the trigger is loosed.



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[Start Setup]



[Manual Scanning]

The scanner can set the reading time in the manual scanning mode.



[Set the Reading Time]

Note: In the manual scanning mode, the unit of barcode scanning time is 1 second. The parameter range from 0 to15 second. 0 means continue scan.

#### **Auto Scanning Mode**

Press the trigger after setup, the scanner will automatically startthe next scan after finish a successful reading; the scanner will stop until the trigger is pressed again. In the default mode, it is not allowed to repeatedly read the same barcode.



[Auto Scanning Mode]

In the auto scanning mode, the unit of barcode scanning time is 1 second. The parameter range from 0 to15 second. 0 means continue scan. It is also can set to allowed to scanning barcode repeatedly.



[Set Barcode Reading Time]



[ Not allowed to read the same barcoderepeatedly ]



[ Allowed to read the same barcoderepeatedly ]



[Recounting after the read]

#### Allowed to Read the Same Barcode Repeatedly

The scanner will begin the next barcode reading automatically after successful reading, until the scanner trigger is pressed again.

Not Allowed to Read the Same Barcode Repeatedly





The scanner will begin the next barcode reading automatically after a successful reading, if the next barcode is same with last one, the scanner will discard the barcode, and waiting for the next different barcode. This setting can be stop when the scanner trigger be pressed again.

#### ♦ Recounting After Successful Reading

Setup the scanner recount the reading timer after successful a barcode reading.

#### **Intermittent Reading Mode**

Device will intermittent reading the barcode. Whether reading successful or not, the reading twice intervals are fixed, intermittent time default value is 1sec, this value can be change. The length of reading time is fixed on 100 ms.



[Intermittent Reading]



[Set the Scanning Time Interval]

Note: The time interval is counted in units of 500ms, which can be set in 15 levels (from 01-15). For example

#### Example:

The steps of set the time interval to 5000ms.

- 1. Read the "Start Setup" barcode.
- 2. Read the "Set the Scanning Time Interval" barcode.
- 3. Read the numeric "1" and '0" barcode.
- 4. Read the "Exit Setup" barcode.

#### **Sense Reading Mode**

The device do not need to trigger the scan, and will auto detecting the scan environment changed to start to reading. The reading finished, device will turn to monitoring state to waiting for the next changes in the environment. The surrounding environment sensor sensitivity can be setup. During this mode, click the trigger button can also start reading.



[Sense Reading]



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[Start Setup]

In the sensing reading mode, the scanner can set the reading time. in the unit of 1 second, the parameter rangs from 0-15sec, 0 means non-stop. The scanner also can set the time interval in the interval reading mode (stable sensing reading time). Interval time is in the unit of 500ms, which can be set in 15 levels (from 01-15).



[ Set the Barcode Reading Time ]



[Set the Scanning Time Intervals]

The customer can select the sensitity according to the environmrnt, in order to increase the reading efficiency.



[High Sensitivity]



[Low Sensitivity]



[ Medium Sensitivity ]



[Custom Sensitivity]

## Sensitivity Setup in the Sense Mode

It can be set in 16 levels from 0 to F, the samller the value, the higher the sensibility.

#### **Example:**

#### The steps of set the sensibility to level 5.

- 1. Read the "Start Setup"barcode.
- 2. Read the "Custom Sensibility" barcode.
- 3. Read the numeric "5" barcode.
- 4. Read the "Exit Setup" barcode.

### **Continuous Reading Mode**

The device going to continuous reading without triggered. After successful barcode reading, the scanner will become standby, and keep doing same loop.







[Continuous Reading]

The scanner can set the time interval of scanning in the continuous reading mode.



[Time Interval of Scanning]

Note: In the continuous reading mode, the time interval of scanning is in unit of 500ms, the parameter ranges from 0 to 7500ms

#### **Extended Sense Reading Mode**

The device will to check the environmental change in front of the scanning window. It will delay 200ms before the scanner begin to read. After reading the barcode, the scanner will stop and stay in the checking mode, waiting for the next environment change.



[Extended Sense Reading]

In the extended sense reading mode, the scanner can set the barcode reading time and the time intervals.



[Set the Barcode Reading Time]



[Set the Scanning Time Intervals]

In the extended sense reading mode, the barcode reading time takes 2sec as the unit, the parameter range is 0-30sec, 0 means non-stop. The time interval takes 200ms as the unit, the parameter ranges from 0 to 300ms.

## **Command Triggered Reading Mode**

20

After setup, to begin triggered scanning by sending the stop command in the terminal (such as PC) or reading the "Begin Simulating Trigger". If scanning is successful, then the data will be sent back. The scanner will stop automatically. If it is not successful, the scanner will keep scanning, until the command of stop scanning is received.

To stop barcode scanning by sending the stop command in the terminal (such as PC) or reading the "Stop Simulating Trigger", and require a 2-Digit character passback (such as 0A,0X,etc.,)







[Begin Simulating Trigger]



[Stop Simulating Trigger]



[Commnad Triggered Scanning]

If the reading fails, the scanner will send a symbol to describe that the reading is not successful. Customer can set this symbol.



[Set the Character to Describe Unsuccessful Reading]

## **Security Level Setup**

This value indicates the number of times to decode before correct reading of the confirmation code, the higher value indicated the wrong decoded rate is lower and slower decode speed, on the contrary, faster the decode speed.



[Set Security Level to 1]



[Set Security Level to 2]



[Set Security Level to 3]



[Set Security Level to 4

# **Decoding Sound Setup**



[Turn off Decoding Audio]



[Intermediate Frequency - Weak]



[High Frequency - Laud]



[High Frequency - Median]



[High Frequency - Weak]



[Intermediate Frequency - Laud]



[Intermediate Frequency - Median]



[Low Frequency - Laud]



[Low Frequency - Weak]



[150ms Sound Length]



[100ms Sound Length]



[50ms Sound Length]

## **Other Setup**

## **Activate/Abort Temporary Mute**



[ Active Temporary Mute ]



[Exit Temporary Mute]



[Exit Setup]



# **Chapter 3 Inquiry Command**

## Introduction

In order to inquire, the HR15 cradle information can feed back to the host by reading the setup barcode.



[Inquire all the Information]



[Inquire the Firmware Information]



[Inquire the Serial Number]



[Inquire the Release Date]



[Inquire the Product Name]



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# **Chapter 4 Communication Setup**

# **Serial Port Setup**

#### **Baud Rate Setup**

When the scanner connects with host by serial port, both sides should set the same parameters in order to guarantee the smooth communication, the baud reta (transmission speed) of communication is necessary.



99902104

[9600]



....

[2400]



[14400]



[38400]



[115200]



[1200]



[4800]



[19200]



[57600]



[Exit Setup]



## **Check Setup**



[No Check]



[Even Check]



[Odd Check]

## **Stop Bit**



[1 Stop Bit]



[2 Stop bits]

#### **Flow Control Setup**



No Flow Control



CTS Flow Control



**RTS Flow Control** 



RTS\_CTS Flow Control

### **Data Bit**



8 Data Bits





[Exit Setup]



99902160

8 Data Bits, no Check, 1 Stop Bit



8 Data Bits, Even Check, 1 Stop Bit



8 Data Bits, Odd Check, 1 Stop Bit



7 Data Bits



7 Data Bits, Even Check, 1 Stop Bit

8 Data Bits, no Check, 2 Stop Bit



8 Data Bits, Even Check, 2 Stop Bit



8 Data Bits, Odd Check, 2 Stop Bit



7 Data Bits, Even Check, 2 Stop Bit



7 Data Bits, Odd Check, 2 Stop Bit



7 Data Bits, Odd Check, 2 Stop Bit

# **USB Function Setup**

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#### **USB Virtual Keyboard Function**



**USB Virtual Keyboard Function** 



[Exit Setup]



# **USB Virtual Serial Port Function**



**USB Virtual Serial Port Function** 





# **Keyboard Function Setup**

# **Keyboard Layout**



1<sup>st</sup> American English



2<sup>nd</sup> Japanese



3<sup>rd</sup> Danish



 $\mathbf{4}^{\text{th}}$  Finland



5<sup>th</sup> France



6<sup>th</sup> Turkey F

# 00000007

7<sup>th</sup> Italy



8<sup>th</sup> Norway



9<sup>th</sup> Spanish



10<sup>th</sup> Turkey Q



11st Britain

# Set the Delay between Characters

The range of the delay time between characters is from 0 to 75 ms, it takes 5ms as one level, totally 15 levels. The default value is 0ms.



28 Ex





**Delay Setup Between Characters** 

# **Character Conversion**



No Conversion



All Capital Letter



All Lowercase Letter



Case the Opposite



# **Chapter 5 Data Format Setup**

#### Introduction

After successful barcode reading, the customer will receive a string of data which can be numbers, English characters symbols and so on, this string of data is the data information included in the barcode.

The barcode data information may not be enough in the application, or the data included in the barcode can not meet your requirement. If you want to know from which type of barcode comes out this string of data, or in which date the barcode data is scanned, or you hope that the text in which the barcode is recorded can perform automatical change lines after one barcode scanning is finished, but these information may not be included in the barcode data.

Adding these information into the barcode will increase the barcode length and make it unflexible, thus, this method does not deserve recommendation. Then we thought about to add something before or after the barcode data, which can be added or shielded according to the requirement. The things we add are the prefix and suffix of barcode data. This method can help to meet the requirement and it is not necessary to change the barcode.

Note: the barcode processing step: to add prefix and suffix first (except for the end mark suffix), then the end mark suffix.

# **Prefix Sequence Setup**



CodeID+Custom+AIMID



Custom+CodeID+AIMID

# **Custom Prefix**

# **Add Custom Prefix or Not**

The custom prefix will add the customer-defined character string before the decoding information, the length of character string should not more than 10.

For example, it is allowed to add custom prefix and set the prefix to character string "AB", by reading the barcode with data "123", the scanner adds "AB" before "123, and the host will receive "AB123".





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It is not Allow to Add Custom Prefix



Allow to Add Custom Prefix

#### **Define the Custom Prefix**

Read the "Set the Custom Prefix" first, and then read the hexadecimal value of every byte of the prefix character string which will be set according to priority.



Set custom prefixes

For example: set the custome prefix to "CODE" (the hexadecimal value is 0x43/0x4F/0x44/0x45)

- 1. Read the "Start Setup" barcode.
- 2. Read the "Set the Custom Prefix" barcode.
- 3. Read the following number code: "4", "3", "4", "F", "4", "4", "5"
- 4. Read the "Save" barcode.
- 5. Read the "Exit Setup" barcode.

After the setup of "it is allowed to add custom profix" is finished, by reading any barcode, the scanner will add custom prefix character string "CODE" before the data.

#### **AIM ID Prefix**

AIM is abbreviation of "Automatic Identification Manufacturers", AIMID defines the identifier for every kind of standard barcode, see the appendix. After decoding, the scanner can add the identifier before the barcode data, which can be regarded as AIMID prefix.



It is not Allow to Add AIMID Prefix



Allow to Add AIMID Prefix

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# **Code ID Prefix**

Except for using AIM prefix to identify different barcode, the customers also can use CodeID prefix to perform the same function. Different from the AIM prefix, the customer can define the CodeId prefix corresponding to every kind of barcode.

The CodeID of all the barcodes includes one or two characters, which must be alphabet and can not be set as





numbers, invisible character or interpunction.



It is not Allow to Add CodeID Prefix



Restore the Default CodeID



Allow to Add CodeID Prefix

# **Custom Suffix**

# **Add Custom suffix or Not**

The custom suffix will add the customer-defined character string after the decoding information.

For example, it is allowed to add custom suffix and set the suffix to character string "AB", by reading the barcode with data "123", the scanner adds "AB" after "123, and the host will receive "AB123"



It is not Allow to Add Custom Suffix



Allow to Add Custom Suffix

#### **Define the Custom suffix**

Read the "Set the Custom suffix" first, and then read the hexadecimal value of every byte of the suffix character string which will be set, according to priority.



Set the Custom suffix

For example: Set the custome suffix to "AGE" (the hexadecimal value is 0x41/0x47/0x45)

- 1. Read the "Start Setup" barcode.
- 2. Read the "Set the Custom Suffix" barcode.
- 3. Read the following number code: "4""1""4""7""4""5"
- 4. Read the "Save" barcode.
- 5. Read the "Exit Setup" barcode.





After the setup of "it is allowed to add custom suffix" is finished, by reading any barcode, the scanner will add custom suffix character string "AGE" after the data.

#### **End Mark Suffix**

#### **Add End Mark Suffix or Not**

End mark suffix is used to declear the end of a intact data information, which must be the last part of the data, no other data will be added behind it.

The content, decoding informatuon and prefix of custom suffix can be formated, but the end mark suffix can not, and this is the fundamental differences between end mark suffix and custom suffix.



It is not Allow to Add End Mark Suffix



Allow to Add End Mark Suffix

#### **Define the End Mark Suffix**

Read the "Define the End Mark Suffix" first, and then read the hexadecimal value of every byte of the suffix character string which will be set, according to priority.



Set the End Mark Suffix



Set the end mark suffix to 0x0D, ,and make it can be sent



Set the end mark suffix to 0x0D,0x0A ,and make it can be sent

For Example: Set the end mark of Windows Operation System to "newline"

- 1. Read the "Start Setup" barcode.
- 2. Read the "Set the End Mark Suffix" barcode.
- 3. Read the "Set the end mark suffix to 0x0D,0x0A, and make it can be sent".
- 4. Read the "Save" barcode.
- 5. Read the "Exit Setup" barcode.





After setup of "it is allowed to add end mark suffix" is finished, by reading any barcode, the scanner will add newline after the final data.



[Exit Setup]



# **Chapter 6 Barcode Parameter Setup**

# Introduction

Every kind of barcode has its own special character; the customer can adjust the scanner to suit the character changes by the setup barcode introduced in this chapter. The customer can also forbid the scanner to read the barcode types which are not used in order to enhance its working performance.

#### **Code 128**

#### **Restore Default Value**

By reading the barcode, the parameter setup of Code 128 will be restored to the factory default state.



Restore the Default Setup Value of Code 128

#### Allow to Read Code 128 or not



Allow to Read Code 128



Prohibit Reading Code 128

Note: the scanner will become unable to read Code 128 by reading the setup barcode "Prohibit Reading Code 128", thus, if the scanner is unable to read the Code128, please try to read the setuo barcode "allow to read code 128".

# **Code ID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup





[Start Setup]

Example: Set the CodeID of Code 128 to "p" (the hexadcimal value is 0x70):

- Read the "Start Setup" barcode. 1.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" (see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **Set the Barcode Reading Length Limit**

The scanner is only able to read the Code 128 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of byte (the maximum value and minimum value also included), the Code 128 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit  $\diamond$
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit



Set the Minimum Length Limit



Set the Maximum Length Limit

Note : the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

Example: Set the scanner read the Code128 with barcode length between 8 to 12 characters.

- 1. Read the "Stat Setup" barcode.
- 2. Read the barcode of "Set the Minimum Length Limit".
- 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
- Read the "Save" barcode.(see the appendix—numeric barcode) 4.
- 5. Read the barcode of "Set the Maximum Length Limit".
- 6. Read the numeric barcode "1".
- 7. Read the numeric barcode "2".
- 8. Read the "Save" barcode.(see the appendix—numeric barcode)
- Read the "Exit Setup" barcode. 9.

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[Exit Setup]



#### UCC/EAN-128

#### **Restore Default Value**

By reading the barcode, the parameter setup of UCC/EAN-128 will be restored to the factory default state.



Restore the Default Setup Value of UCC/EAN-128

#### Allow to Read UCC/EAN-128 or not



Allow to Read UCC/EAN-128



Prohibit Reading UCC/EAN-128

Note: the scanner will become unable to read UCC/EAN-128 by reading the setup barcode "Prohibit Reading UCC/EAN-128", thus, if the scanner is unable to read the UCC/EAN-128, please try to read the setuo barcode "allow to read UCC/EAN-128".

# **Code ID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of UCC/EAN-128 to "p" (the hexadcimal value is 0x70):

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set the Barcode Reading Length

The scanner is only able to read the UCC/EAN-128 whose tramsmission content length is in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), The UCC/EAN-128 exceeds the range can not be read or transmitted.





- [Start Setup]
- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit  $\diamond$
- $\diamond$ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit



Set the Maximum Length Limi



Set the Minimum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

Example: Set the scannerread the UCC/EAN-128 with barcode length between 8 to 12 characters.

- 1. Read the "Start Setup" barcode.
- 2. Read the barcode of "Set the Minimum Length Limit".
- 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
- 4. Read the "Save" barcode. (see the appendix—numeric barcode)
- 5. Read the barcode of "Set the Maximum Length Limit".
- 6. Read the numeric barcode "1".
- 7. Read the numeric barcode "2".
- Read the "Save" barcode.(see the appendix—numeric barcode) 8.
- 9. Read the "Exit Setup" barcode.

# **AIM 128**

# **Restore Default Value**

By reading the barcode, the parameter setup of UCC/EAN-128 will be restored to the factory default state.



Restore the Default Setup Value of UCC/EAN-128

# AIM 128 Allow to Read AIM-128 or not



Allow to Read AIM-128



Prohibit Reading AIM-128

Note: the scanner will become unable to read AIM-128 by reading the setup barcode "Prohibit Reading AIM-128", thus, if the scanner is unable to read the AIM-128, please try to read the setuo barcode "allow to read AIM-128".



[Exit Setup]

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[Start Setup]

# Code ID Setup

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of AIM-128 to "p" (the hexadcimal value is 0x70):

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **Set the Barcode Reading Length**

The scanner is only able to read the AIM-128 whose tramsmission content length is in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), The AIM-128 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- $\diamond$ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit



Set the Maximum Length Limi



Set the Minimum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length

Example: Set the scanner read the AIM128 with barcode length between 8 to 12 characters.

- 1. Read the "Start Setup" barcode.
- 2. Read the barcode of "Set the Minimum Length Limit".
- 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
- 4. Read the 'Save" barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of "Set the Maximum Length Limit"
- 6. Read the numeric barcode "1".
- Read the numeric barcode "2". 7.



[Exit Setup]

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- 8. Read the 'Save" barcode.(see the appendix—numeric barcode)
- 9. Read the "Exit Setup" barcode.

# EAN-8

#### **Restore Default Value**

By reading the barcode, the parameter setup of EAN-8 will be restored to the factory default state.



Restore the Default Setup Value of EAN-8

#### Allow to Read EAN-8 or not



Allow to Read EAN-8



Prohibit Reading EAN-8

Note: the scanner will become unable to read EAN-8 by reading the setup barcode "Prohibit Reading EAN-8", thus, if the scanner is unable to read the EAN-8, please try to read the setuo barcode "allow to read EAN-8".

# **Code ID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of EAN-8 to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set Whether or not to Read 2-Digit Extracode

2-Digit extended code means to add 2-digit numeric barcode behind the normal barcode.







Do not read the 2-Digit Extracode



Allow to Read 2-Digit Extracode



The Barcode Must Include 2-Digit Extracode,

# Set Whether or not to Read 5-Digit Extracode

5-Digit extended code means to add 5-Digit numeric barcode behind the normal barcode.



Do not read the 5-Digit Extracode



Allow to Read 5- Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

- ♦ By setting "Allow to Read 2-Digit Extracode", the scanner can read the new barcode consisted of normal barcode and extracode, and the normal barcode without extracode.
- By setting "Do not read the 2-Digit Extracode", the scanner can only read the normal barcode part of the new barcode, the additional part of the new barcode which combines the normal barcode and extended barcode can not be read.
- ♦ By setting "The Barcode Must Include 2-Digit Extracode,the scanner is only able to read the 2-digits extracode.

# Set Whether or not to Send the Check Digit

The barcode data of EAN-8 is fixed in 8 characters, the 8<sup>th</sup> digit is the check digit for checking the correctness of the 8 characters.



Transmit the Check Bit



Do not Transmit the Check Digit





[Start Setup]

# **EAN-13**

#### **Restore Default Value**

By reading the barcode, the parameter setup of EAN-13 will be restored to the factory default state.



Restore the Default Setup Value of EAN-13

# Allow to Read EAN-13 or not



Allow to Read EAN-13



Prohibit Reading EAN-13

Note: the scanner will become unable to read EAN-13 by reading the setup barcode "Prohibit Reading EAN-13", thus, if the scanner is unable to read the EAN-13, please try to read the setuo barcode "allow to read EAN-13".

# Set Whether or not to Send the Check Digit

The data of EAN-13 barcode is fixed 13 digit, the 13rd bit is the check bit which is used in checking the correctness of all the 13 digit.



Send the Check Digit



Send the Check Digit

# Code IDSetup

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To activate the setup function by reading "CodeID Setup", then read and save the hexadcimal value inaccordance with the character which will be set to the CodelD.



CodeID Setup

Example: Set the CodeID of EAN-13 to "p" (the hexadcimal value is 0x70).

- Read the "Start Setup" barcode. 1.
- Read the "CodeID Setup" barcode. 2.
- Read the numeric barcode "7", "0" (see the appendix—numeric barcode)



[Exit Setup]



[Start Setup]

- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set Whether or not to Read 2-Digit Extracode

2-Digit extended code means to add 2-digit numeric barcode behind the normal barcode.



Do not read the 2-Digit Extracode



Allow to Read 2-Digit Extracode



The Barcode Must Include 2-Digit Extracode

# Set Whether or not to Read 5-Digit Extracode

5-Digit extended code means to add 5-Digit numeric barcode behind the normal barcode.



Do not read the 5-Digit Extracode



Allow to Read 5-Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

- By setting "Allow to Read 2-Digit Extracode", the scanner can read the new barcode consisted of normal barcode and extracode, and the normal barcode without extracode.
- ♦ By setting "Do not read the 2-Digit Extracode", the scanner can only read the normal barcode part of the new barcode, the additional part of the new barcode which combines the normal barcode and extended barcode can not be read.
- ♦ By setting "The Barcode Must Include 2-Digit Extracode, the scanner is only able to read the 2-digits extracode.

# **Extended Setup**

- Do not extend the barcode into 13-digit EAN-13, means to keep the original type and data length.
- ♦ Extend the Barcode into 13-Digits EAN-13, and lead by 0, means extend the data length but keep the barcode type



[Exit Setup] 43



unchanged.

Extend the Barcode and Transfer into EAN-13, means extend the barcode type and data length.



Do not Extend the Barcode into 13-Digit EAN-13



Extend the Barcode into 13-Digit EAN-13, and lead by 0



Extend the Barcode and Transfer into EAN-13

# **ISSN**

#### **Restore Default Value**

By reading the barcode, the parameter setup of ISSN will be restored to the factory default state.



Restore the Default Setup Value of ISSN

# Allow to Read ISSN or not



Allow to Read ISSN



Prohibit Reading ISSN

# **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read and save the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of ISSN to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.





[Start Setup]

- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **ISBN**

#### **Restore Default Value**

By reading the barcode, the parameter setup of ISBN will be restored to the factory default state.



Restore the Default Setup Value of ISSN

#### Allow to Read ISBN or not



Allow to Read ISBN



Prohibit Reading ISBN

Note: the scanner will become unable to read ISBN by reading the setup barcode "Prohibit Reading ISBN", thus, if the scanner is unable to read the ISBN, please try to read the setuo barcode "allow to read ISBN".

# **ISBN Data Length Setup**



Adopt 13 Characters



Adopt 10 Characters

# CodelDSetup

To activate the setup function by reading "CodeID setup", then read and save the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of ISBN to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.





[Start Setup]

- Read the numeric barcode "7", "0" (see the appendix—numeric barcode) 3.
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- Read the "Exit Setup" barcode. 5.

# **UPC-E**

#### **Restore Default Value**

By reading the barcode, the parameter setup of UPC-E will be restored to the factory default state.



Restore the Default Setup Value of UPC-E

#### Allow to Read UPC-E or not



Allow to Read UPC-E



Prohibit Reading UPC-E

Note: the scanner will become unable to read UPC-E by reading the setup barcode "Prohibit Reading UPC-E", thus, if the scanner is unable to read the UPC-E, please try to read the setuo barcode "allow to read UPC-E".

# Set Whether or not to Send the Check Digit

The data of UPC-E barcode is fixed 8 digit, the 8st bit is the check bit which is used in checking the correctness of allI the 8 digit.



Send the Check Digit



Do not Send the Check Digit

# **CodeID Setup**

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To activate the setup function by reading "CodeID setup", then read and save the hexadcimal value inaccordance with the character which will be set to the CodeID.





[ Start Setup ]

#### CodeID Setup

Example: Set the CodeID of UPC-Eto "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set Whether or not to Read 2-Digit Extracode

2-Digit extended code means to add 2-Digit numeric barcode behind the normal barcode.



Do not read the 2-Digit Extracode



Allow to Read 2-Digit Extracode



The Barcode Must Include 2-Digit Extracode,

# Set Whether or not to Read 5-Digit Extracode

5-Digit extended code means to add 5-Digit numeric barcode behind the normal barcode.



Do not read the 5-Digit Extracode



Allow to read the 5-Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

- By setting "Allow to Read 2-Digit Extracode", the scanner can read the new barcode consisted of normal barcode and extracode, and the normal barcode without extracode.
- By setting "Do not read the 2-Digit Extracode", the scanner can only read the normal barcode part of the new barcode, the additional part of the new barcode which combines the normal barcode and extended barcode can not be read.



47 [Exit Setup]



[Start Setup]

By setting "The Barcode Must Include 2-Digit Extracode, the scanner is only able to read the 2-digits extracode.

# Set Whether or not to Transmit the System Character "0"

The first character of UPC-E barcode is the system character, the fixed value is "0".



Do not Transmit System Character "0"



Transmit System Character "0"

## **Extension Setup**

- "Do not Extend the Barcode Infornmation" means keep the original barcode type and data bit,
- "Extend the Barcode Information into UPC-A" means extend the data bit and leave the barcode type unchanged.  $\diamond$
- "Extend the Barcode Infornmation and Type into UPC-A" means extend the barcode type and data bit.



Do not Extend the Barcode Infornmation



Extend the Barcode Infornmation into UPC-A



Extend the Barcode Infornmation and Type into UPC-A

# **UPC-A**

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#### **Restore Default Value**

By reading the barcode, the parameter setup of UPC-A will be restored to the factory default state.



Restore the Default Setup Value of UPC-A



Allow to Read UPC-A or not



Allow to Read UPC-A



Prohibit Reading UPC-A

Note: the scanner will become unable to read UPC-A by reading the setup barcode "Prohibit Reading UPC-A", thus, if the scanner is unable to read the UPC-A, please try to read the setuo barcode "allow to read UPC-A".

# **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID of UPC-Ato "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set Whether or not to Transimit the Check Digit

The barcode data of UPC-A is fixed of 13 digit, the 13<sup>rd</sup> digit is the check digit.



Send the Check Digit



Do not Send the Check Digit

# Set Whether or not to Transmit the System Digit "0"

The first character of UPC-E barcode is the system Digit, the value is "0".





[Exit Setup]

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Do not Transmit System Character "0"



Transmit System Character "0"

# Set Whether or not to Read 2-Digit Extracode

2-Digit extended code means to add 2-digit numeric barcode behind the normal barcode.



Do not read the 2-Digit Extracode



Allow to Read 2-Digit Extracode



The Barcode Must Include 2-Digit Extracode

# Set Whether or not to Read 5-Digit Extracode

5-Digit extended code means to add 5-digit numeric barcode behind the normal barcode



Do not read the 5-Digit Extracode



Allow to Read 5-Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

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- By setting "Allow to Read 2-Digit Extracode", the scanner can read the new barcode consisted of normal barcode and extracode, and the normal barcode without extracode.
- ♦ By setting "Do not read the 2-Digit Extracode", the scanner can only read the normal barcode part of the new barcode, the additional part of the new barcode which combines the normal barcode and extended barcode can not be read.
- ♦ By setting "The Barcode Must Include 2-Digit Extracode", the scanner is only able to read the 2-digit extracode.





#### Interleaved 2 of 5

#### **Restore Default Value**

By reading the barcode, the parameter setup of Interleaved 2 of 5 will be restored to the factory default state.



Restore the Default Setup Value of Interleaved 2 of 5

#### Allow to Read Interleaved 2 of 5 or not



Allow to Read Interleaved 2 of 5



Prohibit Reading Interleaved 2 of 5

Note: the scanner will become unable to read Interleaved 2 of 5 by reading the setup barcode "Prohibit Reading Interleaved 2 of 5", thus, if the scanner is unable to read the Interleaved 2 of 5, please try to read the setuo barcode "allow to read Interleaved 2 of 5".

# **Code ID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID ofInterleaved2 of 5 to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# Set Whether or not to Transmit the Check Character

Interleaved 2of 5 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

♦ Set "No Check", the scanner will transmit all the barcode data.





[Start Setup]

- Set "Check but do not Send Check Digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed".
- Set "Check and Send Check Digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed".



No Check



Check but do not Transmit the Check Character

Check and Transmit Check Character

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Interleaved2 of 5 to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Interleaved2 of 5 with 4 characters.)

# **Set the Barcode Reading Length**

The scanner is only able to read the Interleaved2 of 5 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), the Interleaved2 of 5 exceeds the range can not be read or transmitted.

- $\diamond$ Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit



Set the Minimum Length Limit



Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.



ITF-6

TIF-6 is a knid of special Interleaved2 of 5 barcode with the barcode length of 6 characters and the last character as the check character. By default, no special processing is performed on ITF-6, its setup is the same with the normal Interleaved2 of 5.

TF-6 priority principle: if the setup of ITF-6 has been changed, then the setup of all the Interleaved2 of 5 barcode with the barcode length of 6 characters and the last character as the check character should be in accordance with ITF-6.



Restore the Default Setup Value of ITF-6



Prohibit Reading ITF-6



Allow to Read ITF-6, but do not Transmit the Check Digit



Allow to Read ITF-6 and Transmit the Check Digit

Note: if the setup of ITF-6 confilits with the setup of Interleaved2 of 5.for example, reading ITF-6 is allowed, but reading Interleaved2 of 5 is not, according to the priority principle of ITF-6, the Interleaved2 of 5 with the barcode length of 6 characters and the last character as the check character can be read, but other Interleaved2 of 5 barcodes can not be read.

#### **Code ID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID ofITF-6to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)





- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **ITF-14**

TIF-14 is a knid of special Interleaved2 of 5 barcode with the barcode length of 14 characters and the last character as the check character. By default, no special processing is performed on ITF-14, its setup is the same with the normal Interleaved2 of 5.

ITF-14 priority principle: if the setup of ITF-14 has been changed, then the setup of all the Interleaved2 of 5 barcode with the barcode length of 14 characters and the last character as the check character should be in accordance with ITF-14.



Restore the Default Setup Value of ITF-14



Allow to Read ITF-14, but do not Transmit the Check Digit



Prohibit Reading ITF-14



Allow to Read ITF-14 and Transmit the Check Digit

Note: if the setup of ITF-14confilits with the setup of Interleaved2 of 5, for example, reading ITF-14 is allowed, but reading Interleaved2 of 5 is not; according to the priority principle of ITF-14, the Interleaved2 of 5 with the barcode length of 14 characters and the last character as the check character can be read, but other Interleaved2 of 5 barcodes can not be read. If the ITF-14 confilits with Deutsch14 the ITF-14 will have priority to read.

#### CodelDSetup

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID ofITF-14to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)





5. Read the "Exit Setup" barcode.

# **Deutsche 14**

# **Restore the Default Value**

By reading the barcode, the parameter setup of Deutsche14 will be restored to the factory default state.



Restore the Default Setup Value of Deutsche14

#### Allow to Read Deutsche14 or not



Allow to Read Deutsche14, but do not send the check digit



Prohibit Reading Deutsche14



Allow to Read Deutsche14 and send the check digit

Note: the scanner will become unable to read Deutsche14 by reading the setup barcode "Prohibit Reading Deutsche14", thus, if the scanner is unable to read the Deutsche14, please try to read the setuo barcode "allow to read Deutsche14". Deutsche 14 uses the same coding method as ITF-14 and normal ITF, so if all these are used at the same time, the misunderstanding of function setup and decoding will easily occure, thus, it is suggested to turn off the Deutsche 14 if it is not in use.

# **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID ofDeutsche14 to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.





- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### Deutsche 12

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Deutsche12 will be restored to the factory default state.



Restore the Default Setup Value of Deutsche12

#### Deutsche 12 Allow to Read Deutsche 12 or not



Allow to Read Deutsche12, but do not send the check digit



Prohibit Reading Deutsche12



Allow to Read Deutsche12 and send the check digit

Note: the scanner will become unable to read Deutsche12 by reading the setup barcode "Prohibit Reading Deutsche12", thus, if the scanner is unable to read the Deutsche12, please try to read the setuo barcode "allow to read Deutsche12". Deutsche 12 uses the same coding method as ITF-12 and normal ITF, so if all these are used at the same time, the misunderstanding of function setup and decoding will easily occure, thus, it is suggested to turn off the Deutsche 12 if it is not in use.

# **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.







CodeID Setup

Example: Set the CodeID ofDeutsche12to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **COOP 25(Japanese Matrix 2 of 5)**

# **Restore the Default Value**

By reading the barcode, the parameter setup of COOP25 will be restored to the factory default state



Restore the Default Setup Value of COOP25

# Allow to Read COOP 25 or not



Allow to Read COOP25



Prohibit Reading COOP25

Note: the scanner will become unable to read COOP25 by reading the setup barcode "Prohibit Reading UCC/EAN-128", thus, if the scanner is unable to read the COOP25, please try to read the setuo barcode "allow to read COOP25".

#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Example: Set the CodeID of COOP25 to "p" (the hexadcimal value is 0x70).

1. Read the "Start Setup" barcode.





- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **Check Setup**

COOP25 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- ♦ Set "No Check", the scanner will transmit all the barcode data.
- ♦ Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check Digit



Check but do not Send Check Digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the minimum barcode reading length of COOP25(JapaneseMatrix2 of 5) to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Deutsch12 with 4 characters.)

#### Set the Barcode Reading Length

The scanner is only able to read the COOP25 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), the COOP25 exceeds the range can not be read or transmitted.

- ♦ Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.







Set the Minimum Length Limit



99911707

Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

# Matrix 2 of 5 (European Matrix 2 of 5)

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Matrix2 of 5 will be restored to the factory default state.



Restore the Default Setup Value of Matrix2 of 5

# Restore the Default Setup Value of Matrix2 of 5



Allow to Read Matrix2 of 5



Prohibit Reading Matrix2 of 5

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Note: the scanner will become unable to read Matrix2 of 5 by reading the setup barcode "Prohibit Reading Matrix2 of 5", thus, if the scanner is unable to read the Matrix2 of 5, please try to read the setuo barcode "allow to read Matrix2 of 5".

# **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.







#### Code ID Setup

Example: Set the CodeID ofMatrix 2 of 5 to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **Check Setup**

Matrix 2of 5 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- ♦ Set "No Check", the scanner will transmit all the barcode data
- ♦ Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check digit



Check but do not Send Check digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Matrix2 of 5 to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Matrix2 of 5 with 4 characters.)

#### Set the Barcode Reading Length

The scanner is only able to read the Matrix2of 5 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also



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[Start Setup]

included), the Matrix2of 5 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.



Set the Minimum Length Limit



Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

#### **Industrial 25**

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Industrial 25 will be restored to the factory default state.



Restore the Default Setup Value of Industrial 25

#### Allow to Read Deutsche 12 or not



Allow to Read Industrial 25



Prohibit Reading Industrial 25

Note: the scanner will become unable to read Industrial 25 by reading the setup barcode "Prohibit Reading Industrial 25", thus, if the scanner is unable to read the Industrial 25, please try to read the setuo barcode "allow to read Industrial 25".

#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup





Example: Set the CodeID ofIndustrial 25to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

# **Check Setup**

Industrial 25 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- Set "No Check", the scanner will transmit all the barcode data
- Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check digit



Check but do not Send Check digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Industrial 25 to 4 characters and "do not send check digit", in such circumstances,the scanner is not able to read the Industrial 25 with 4 characters.)

# Set the Barcode Reading Length

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The scanner is only able to read the Industrial 25 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the Industrial 25 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.





[Exit Setup]



Set the Minimum Length Limit



Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

## Standard 25

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Standard 25 will be restored to the factory default state.



Restore the Default Setup Value of Standard 25

#### Allow to Read Standard 25 or not



Allow to Read Standard 25



Prohibit Reading Standard 25

Note: the scanner will become unable to read Standard 25 by reading the setup barcode "Prohibit Reading Standard 25", thus, if the scanner is unable to read the Standard 25, please try to read the setuo barcode "allow to read Standard 25".

#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofStandard 25to "p" (the hexadcimal value is 0x70).

1. Read the "Start Setup" barcode.





- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

Read "Exit Setup Barcode"

## **Check Setup**

Standard 25 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- ♦ Set "No Check", the scanner will transmit all the barcode data
- ♦ Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- ♦ Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the
- ♦ scanner will indicate "barcode reading failed"



No Check



Check and Send Check digit



Check but do not Send Check digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the minimum barcode reading length of Standard 25 to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Standard 25 with 4 characters.)

#### Set the Barcode Reading Length

64

The scanner is only able to read the Standard 25 with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the Standard25 exceeds the range can not be read or transmitted.

- ♦ Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit







Set the Minimum Length Limit



Set the Maximum Length Limit

Note :the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

#### Code 39

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Code 39 will be restored to the factory default state.



Restore the Default Setup Value of Code 39

#### Allow to Read Code 39 or not



Allow to Read Code 39



Prohibit Reading Code 39

Note: the scanner will become unable to read Code 39 by reading the setup barcode "Prohibit Reading Code 39", thus, if the scanner is unable to read the Code 39, please try to read the setuo barcode "allow to read Code 39".

### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofCode39to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)





- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **Check Setup**

Code 39 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- $\diamond$ Set "No Check", the scanner will transmit all the barcode data
- Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check digit



Check but do not Send Check digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Code 39 to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Code 39 with 4 characters.)

#### Set whether to Send the start and stop character or not

There are two characters of "\*"before and after the Code39 barcode data as the start and stop character. The system can set whether or not to send the start and stop character after successful barcode reading.



Send the Start and the Stop Character



Do not Send the Start and the Stop Character

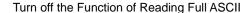
#### Set the Reading Range of ASCII Code

Code 39 can consist all the ASCII character, by default, the scanner is only able to read part of the ASCII character, by setting, the scanner can activiate the function of reading the intact ASCII character.











Turn on the Function of Reading Full ASCII

#### **Set the Barcode Reading Length**

The scanner is only able to read the Code 39 with transmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the Code 39 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- ♦ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.



Set the Minimum Length Limit [Code: 99912412]



Set the Maximum Length Limit

[Code: 99912413]

Note :the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

Example: The steps of set the scanner read the Code 39 with barcode length between 8 to 12 characters.

- 1. Read the "Start Setup" barcode.
- 2. Read the barcode of "Set the Minimum Length Limit".
- 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of "Set the Maximum Length Limit".
- 6. Read the numeric barcode "1".
- 7. Read the numeric barcode "2".
- 8. Read the "Save" barcode.(see the appendix—numeric barcode)
- 9. Read the "Exit Setup" barcode.

#### Codabar

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Codabar will be restored to the factory default state.



[Exit Setup]





Restore the Default Setup Value of Codabar

#### Allow to Read Codabar or not



Allow to Read Codabar



Prohibit Reading Codabar

Note: the scanner will become unable to read Codabar by reading the setup barcode "Prohibit Reading Codabar", thus, if the scanner is unable to read the Codabar, please try to read the setuo barcode "allow to read Codabar".

## **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofCodabarto "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **Check Setup**

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Codabar barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- Set "No Check", the scanner will transmit all the barcode data
- Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"





No Check



Check and Send Check Digit



Check but do not Send Check Digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Codabar to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Codabar with 4 characters.)

## **Start and Stop Character Setup**



Do not Send the Start and Stop Character



Send the Start and Stop Character



Set "ABCD/ABCD" as the Start and Stop Character



Set "ABCD/TN\*E" as the Start and Stop Character



Set "abcd/abcd" as the Start and Stop Character



Set "abcd/tn\*e" as the Start and Stop Character

#### Set the Barcode Reading Length

The scanner is only able to read the Codabar with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the Codabar exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- ♦ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.











Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

#### Example: The steps of set the scanner read the Codabarwith barcode length between 8 to 12 characters.

- 1. Read the "Start Setup" barcode.
- 2. Read the barcode of "Set the Minimum Length Limit".
- 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of "Set the Maximum Length Limit".
- 6. Read the numeric barcode "1".
- 7. Read the numeric barcode "2".
- 8. Read the "Save" barcode.(see the appendix—numeric barcode)
- 9. Read the "Exit Setup" barcode.

#### Code 93

70

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Code 93 will be restored to the factory default state.



Restore the Default Setup Value of Code 93

#### Allow to Read Code 93 or not



Allow to Read Code 93



Prohibit Reading Code 93

Note: the scanner will become unable to read Code 93 by reading the setup barcode "Prohibit Reading Code 93", thus, if the scanner is unable to read the Code 93, please try to read the setuo barcode "allow to read Code 93".

99900032



#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofCode 93to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **Check Setup**

Code 93 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- ♦ Set "No Check", the scanner will transmit all the barcode data
- Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"
- Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check Digit



Check but do not Send Check Digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the minimum barcode reading length of Code 93 to 4 characters and "do not send check digit", in such circumstances, the scanner is not





able to read the Code 93 with 4 characters.)

## Set the Barcode Reading Length

The scanner is only able to read the Code 93 with transmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), the Code 93 exceeds the range can not be read or transmitted.

- ♦ Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- ♦ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.

 $\diamond$ 



Set the Minimum Length Limit



Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

#### Code 11

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#### **Restore the Default Value**

By reading the barcode, the parameter setup of Code 11 will be restored to the factory default state.



Restore the Default Setup Value of Code 11

#### Allow to Read Code 11 or not



Allow to Read Code 11



Prohibit Reading Code 11

Note: the scanner will become unable to read Code 11 by reading the setup barcode "Prohibit Reading Code 11", thus, if the scanner is unable to read the Code 11, please try to read the setuo barcode "allow to read Code 11".





[Start Setup]

#### CodeID Setup

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofCode 11to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

## **Check Setup**

Code 11 barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

Set "No Check", the scanner will transmit all the barcode data.



No Check



One Digit Check, MOD11



Two Digits Check, MOD11/MOD11



Two Digits Check, MOD11/MOD9



MOD11 Single Check (Len<=10) MOD11/MOD11 Double Check (Len>10)



MOD11 Single Check (Len<=10) MOD11/MOD9 Double Check (Len>10)





Do not Send the Check Digit

00012712

Send the Check Digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Code 11 to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Code 11 with 4 characters.)

#### Set the Barcode Reading Length

The scanner is only able to read the Code 11 with transmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character (the maximum value and minimum value also included), the Code 11 exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- ♦ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.



Set the Minimum Length Limit



Set the Minimum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

#### Example: The steps of set the scanner read the Code 11 with barcode length between 8 to 12 characters.

- 1. Read the "Start Setup" barcode.
  - 2. Read the barcode of "Set the Minimum Length Limit".
  - 3. Read the numeric barcode "8", (see the appendix—numeric barcode)
  - 4. Read the "Save" barcode.(see the appendix—numeric barcode)
  - 5. Read the barcode of "Set the Maximum Length Limit".
  - 6. Read the numeric barcode "1".
  - 7. Read the numeric barcode "2".
  - 8. Read the "Save" barcode.(see the appendix—numeric barcode)
  - 9. Read the "Exit Setup" barcode.

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## **Plessey**

#### **Restore the Default Value**

By reading the barcode, the parameter setup of Plessey will be restored to the factory default state.



Restore the Default Setup Value of Plessey

#### Allow to Read Plessey or not



Allow to Read Plessey



Prohibit Reading Plessey

Note: the scanner will become unable to read Plessey by reading the setup barcode "Prohibit Reading Plessey", thus, if the scanner is unable to read the Plessey, please try to read the setuo barcode "allow to read Plessey".

#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofPlesseyto "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

## **Check Setup**

Plessey barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

- ♦ Set "No Check", the scanner will transmit all the barcode data
- Set "Check but do not Send Check digit", the scanner will check according to the last bit, if successful, all the data except for the check digit will be transmitted, if failed, then the scanner will indicate "barcode reading failed"





[Start Setup]

Set "Check and Send Check digit" the scanner will check according to the last bit, if successful, all the data including the check digit will be transmitted, the check digit will be treated as the last bit of the normal data; if failed, then the scanner will indicate "barcode reading failed"



No Check



Check and Send Check digit



Check but do not Send Check digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of Plessey to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the Plessey with 4 characters.)

## Set the Barcode Reading Length

The scanner is only able to read the Plessey with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the Plessey exceeds the range can not be read or transmitted.

- $\diamond$ Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit.
- Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit.



Set the Minimum Length Limit



Set the Maximum Length Limit

Note: the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.

## **MSI-Plessey**

#### **Restore the Default Value**

By reading the barcode, the parameter setup of MSI-Plessey will be restored to the factory default state.







Restore the Default Setup Value of MSI-Plessey

#### Allow to Read MSI-Plessey or not



Allow to Read MSI-Plessey



Prohibit Reading MSI-Plessey

Note: the scanner will become unable to read MSI-Plessey by reading the setup barcode "Prohibit Reading MSI-Plessey", thus, if the scanner is unable to read the MSI-Plessey, please try to read the setup barcode "allow to read MSI-Plessey".

## **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofMSI-Plesseyto "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **Check Setup**

MSI-Plessey barcode data does not compulsively include the check digit, if check digit exists, then it is the last character. Check digit is calculated according to all the datas, for checking if the data is correct or not.

Set "No Check", the scanner will transmit all the barcode data







No Check



Single Check MOD10



Double Check MOD10/MOD10



Double Check MOD10/MOD11



Do not Send the Check Digit



Send the Check Digit

Note: by setting "do not send the check digit", if the data length except for the 1 character check digit is less than the minimum barcode reading limit, the barcode reading will be failed. (For example: the scanner set the the minimum barcode reading length of MSI-Plessey to 4 characters and "do not send check digit", in such circumstances, the scanner is not able to read the MSI-Plessey with 4 characters.)

## Set the Barcode Reading Length

The scanner is only able to read the MSI-Plessey with tramsmission content length falls in the limited range, the range is consisted of the maximum value and minimum value in units of character, the MSI-Plessey exceeds the range can not be read or transmitted.

- Read the barcode of "Set the Minimum Length Limit" to adjust the minimum length limit
- ♦ Read the barcode of "Set the Maximum Length Limit" to adjust the maximum length limit



Set the Minimum Length Limit



Set the Maximum Length Limit

Note :the maximum length limit of any 1D barcode must not exceed 255, if the maximum length is shorter than the minimum length, then the scanner is only able to read the barcodes with the minimum length and the the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with such length.



[Exit Setup]



**GS1** Databar

#### **Restore the Default Value**

By reading the barcode, the parameter setup of GS1 Databar will be restored to the factory default state.



Restore the Default Setup Value of GS1 Databar

## Allow to Read GS1 Databar or not



Allow to Read GS1 Databar



Prohibit Reading GS1 Databar

Note: the scanner will become unable to read GS1 Databar by reading the setup barcode "Prohibit Reading GS1 Databar", thus, if the scanner is unable to read the GS1 Databar, please try to read the setuo barcode "allow to read GS1 Databar".

#### **CodeID Setup**

To activate the setup function by reading "CodelD setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofGS1 Databarto "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### **PDF417**

#### **Restore the Default Value**

By reading the barcode, the parameter setup of PDF417 will be restored to the factory default state.





**79** [Exit Setup]



[Start Setup]

### Restore the Default Setup Value of PDF417

#### Allow to Read PDF417 or not



Allow to Read PDF417



Prohibit Reading PDF417

Note: the scanner will become unable to read PDF417 by reading the setup barcode "Prohibit Reading PDF417", thus, if the scanner is unable to read the PDF417, please try to read the setuo barcode "allow to read PDF417".

Note: PDF417 can support the barcode with maximum 48 lines x 18 rows.

#### **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofPDF417to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.

#### MicroPDF417

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#### Restore the Default Value

By reading the barcode, the parameter setup of MicroPDF417 will be restored to the factory default state.



Restore the Default Setup Value of MicroPDF417

Allow to Read MicroPDF417 or not 



[Exit Setup]



Allow to Read MicroPDF417



Prohibit Reading MicroPDF417

Note: the scanner will become unable to read MicroPDF417 by reading the setup barcode "Prohibit Reading MicroPDF417", thus, if the scanner is unable to read the MicroPDF417, please try to read the setuo barcode "allow to read MicroPDF417".

Note: MicroPDF417 support the barcode with maximum 255 bytes.

## **CodeID Setup**

To activate the setup function by reading "CodeID setup", then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofMicroPDF417to "p" (the hexadcimal value is 0x70).

- 1. Read the "Start Setup" barcode.
- 2. Read the "CodeID Setup" barcode.
- 3. Read the numeric barcode "7", "0" (see the appendix—numeric barcode)
- 4. Read the "Save" barcode.(see the appendix—numeric barcode)
- 5. Read the "Exit Setup" barcode.



[Exit Setup]



# **Chapter 7 Appendix**

## **Default Setup Table**

| Parameters                             | Default Setup                       | Remark                           |
|--|-------------------------------------|----------------------------------|
| General Setup                          |                                     |                                  |
| Setup Barcode Function                 | On                                  |                                  |
| Send Setup Barcode                     | Off                                 |                                  |
| Working Mode                           | Manual Reading                      |                                  |
| Wireless Comminication Mode            | Asynchronized Mode                  |                                  |
| Set the Barcode Reading Tiem           | 15 Seconds                          | Range: 0-15sec, 0 means non-stop |
| Set the Time Interval between Scanning | 1 second                            | Range: 0-7.5sec                  |
| Sensitivity Level                      | High Sensibility                    | Effective in Sensitivity Mode    |
| Security Level                         | Level 1                             |                                  |
| Decoding Sound                         | Intermediate Frequency-Loud,(150ms) | Tone fo Successful Reading       |
| Read the Same Barcode successivly      | Off                                 | Effective in Auto-Mode           |
| Re-Timing after Successful Reading     | On                                  | Effective in Auto-Mode           |
| Communication Setup                    |                                     |                                  |
| Baud Rate                              | 9600                                |                                  |
| Serial Port Data Check                 | No Check                            |                                  |
| Stop Bit                               | 1 bit                               |                                  |
| Flow Control                           | Off                                 |                                  |
| Data Bits                              | 8 bits                              |                                  |
| USB Virtual Keyboard                   | On                                  |                                  |





| Parameters                   | Default Setup                        | Remark  |
|------------------------------|--------------------------------------|---|
| Virtual Keyboard Layout      | The First, American English keyboard |   |
| Delay between Characters     | 0ms                                  | 0~75ms  |
| Character Conversion         | No conversion                        |   |
| Number Lockup                | Off                                  |   |
| Data Format Setup            |                                      |   |
| Setup of the Prefix sequence | CodeID+Custom+AIMID                  | CodeID+Prefix+(AIMID+Data) +Suffix+Terminal       |
| Add AlMID Prefix             | Off                                  | ]Cm Symbol  |
| Add CodeID                   | Off                                  | 1 or 2 Character, Captital or<br>Lowercase Letter |
| Add Custom Prefix            | Off                                  | The Maximum is 11 characters                      |
| Add Custom Suffix            | Off                                  | The Maximum is 11 characters                      |
| Barcode Parameter Setup      |                                      |   |
| Code128                      |                                      |   |
| Enable                       | On                                   |   |
| Maximum Length               | 255                                  |   |
| Minmum Length                | 1                                    |   |
| UCC/EAN-128                  |                                      |   |
| Enable                       | On                                   |   |
| Maximum Length               | 255                                  |   |
| Minmum Length                | 1                                    |   |
| AIM128                       |                                      |   |
| Enable                       | Off                                  |   |
| Minmum Length                | 1                                    |   |
| EAN-8                        |                                      |   |



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| Parameters                      | Default Setup | Remark |
|---------------------------------|---------------|--------|
| Enable                          | On            |        |
| Send the Check Character        | On            |        |
| Read 2-Digits Extracode         | Off           |        |
| Read 5-Digits Extracode         | Off           |        |
| Extracode is Required, 2-digits | Off           |        |
| Extracode is Required, 5-digits | Off           |        |
| Extend to EAN-13                | Off           |        |
| Type is EAN-13 when Extend      | Off           |        |
| EAN-13                          |               |        |
| Enable                          | On            |        |
| Send the Check Character        | On            |        |
| Read 2-Digits Extracode         | Off           |        |
| Read 5-Digits Extracode         | Off           |        |
| Extracode is Required, 2-digits | Off           |        |
| Extracode is Required, 5-digits | Off           |        |
| ISSN                            |               |        |
| Enable                          | Off           |        |
| ISBN                            |               |        |
| Enable                          | Off           |        |
| Use 10 digits ISBN              | Off           |        |
| UPC-E                           |               |        |
| Enable                          | On            |        |
| Send the Check Character        | On            |        |
| Read 2-Digits Extracode         | Off           |        |





| Parameters                      | Default Setup | Remark |
|---------------------------------|---------------|--------|
| Read 5-Digits Extracode         | Off           |        |
| Extracode is Required, 2-digits | Off           |        |
| Extracode is Required, 5-digits | Off           |        |
| Extend to UPC-A                 | Off           |        |
| Type is UPC-A when Extend       | Off           |        |
| Send the System Digit "0"       |               |        |
| UPC-A                           |               |        |
| Enable                          | On            |        |
| Send the Check Character        | On            |        |
| Read 2-Digits Extracode         | Off           |        |
| Read 5-Digits Extracode         | Off           |        |
| Extracode is Required, 2-digits | Off           |        |
| Extracode is Required, 5-digits | Off           |        |
| Send the System Digit "0"       |               |        |
| Interleaved 2 of 5              |               |        |
| Enable                          | On            |        |
| Check                           | On            |        |
| Send Check Character            | Off           |        |
| Maximum Length                  | 255           |        |
| Minmum Length                   | 6             |        |
| ITF-6                           |               |        |
| Enable                          | Off           |        |
| Send Check Character            | On            |        |
| ITF-14                          |               |        |





| Parameters                            | Default Setup | Remark    |
|---------------------------------------|---------------|-----------|
| Enable                                | Off           |           |
| Send Check Character                  | On            |           |
| Deutshe 14                            |               |           |
| Enable                                | Off           |           |
| Send Check Character                  | On            |           |
| Deutshe 12                            |               |           |
| Enable                                | Off           |           |
| Send Check Character                  | On            |           |
| COOP25 (JapaneseMatrix 2 of 5)        |               |           |
| Enable                                | Off           |           |
| Check                                 | Off           |           |
| Send Check Character                  | Off           |           |
| Maximum Length                        | 255           |           |
| Minmum Length                         | 6             |           |
| Matrix 2 of 5(European Matrix 2 of 5) |               |           |
| Enable                                | On            |           |
| Check                                 | Off           |           |
| Send Check Character                  | Off           |           |
| Maximum Length                        | 255           |           |
| Minmum Length                         | 6             | At less 3 |
| Industrial 25                         |               |           |
| Enable                                | ?             |           |
| Check                                 | ?             |           |
| Send Check Character                  | ?             |           |





| Parameters                                   | Default Setup | Remark     |
|--|---------------|------------|
| Maximum Length                               | ?             |            |
| Minmum Length                                | ?             |            |
| Standard 25                                  |               |            |
| Enable                                       | On            |            |
| Check  | Off           |            |
| Send Check Character                         | Off           |            |
| Maximum Length                               | 255           |            |
| Minmum Length                                | 6             | At less 4  |
| Code 39                                      |               |            |
| Enable                                       | On            |            |
| Check  | Off           |            |
| Send Check Character                         | Off           |            |
| Do not Send Start and Stop Character         | Off           |            |
| Support Full ASCII                           | On            |            |
| Maximum Length                               | 255           |            |
| Minmum Length                                | 4             |            |
| Codabar                                      |               |            |
| Enable                                       | On            |            |
| Check  | Off           |            |
| Send Check Character                         | Off           |            |
| Do not Send Start and Stop Character         | Off           |            |
| ABCD/ABCD as the Start and Stop<br>Character | On            | Select one |



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| Parameters                                | Default Setup | Remark    |
|---|---------------|-----------|
| ABCD/TN*E as the Start and Stop Character | Off           |           |
| abcd/abcd as the Start and Stop Character | Off           |           |
| abcd/tn*e as the Start and Stop Character | Off           |           |
| Maximum Length                            | 255           |           |
| Minmum Length                             | 4             | At less 2 |
| Code 93                                   |               |           |
| Enable                                    | On            |           |
| Check                                     | On            |           |
| Send Check Character                      | Off           |           |
| Maximum Length                            | 255           |           |
| Minmum Length                             | 2             | At less 1 |
| Code 11                                   |               |           |
| Enable                                    | Off           |           |
| Check                                     | Off           |           |
| Send Check Character                      | On            |           |
| 1 Digit MOD10 Check                       | On            |           |
| 2 Digits MOD10/MOD10 Check                | Off           |           |
| 2 Digits MOD10/MOD11 Check                | Off           |           |
| Auto 2 Digits MOD11/MOD11                 | Off           |           |
| Auto 2 Digits MOD11/MOD9                  | Off           |           |
| Maximum Length                            | 255           |           |
| Minmum Length                             | 4             | At less 3 |
| Plessey                                   |               |           |





| Parameters                 | Default Setup | Remark    |
|----------------------------|---------------|-----------|
| Enable                     | Off           |           |
| Check                      | On            |           |
| Send Check Character       | Off           |           |
| Maximum Length             | 255           |           |
| Minmum Length              | 4             | At less 4 |
| MSI-Plessey                |               |           |
| Enable                     | Off           |           |
| Check                      | Off           |           |
| Send Check Character       | On            |           |
| 1 Digit MOD10 Check        | Off           |           |
| 2 Digits MOD10/MOD10 Check | Off           |           |
| 2 Digits MOD10/MOD11 Check | Off           |           |
| Maximum Length             | 255           |           |
| Minmum Length              | 4             | At less 3 |
| GS1 Databar                |               |           |
| Enable                     | On            |           |
| PDF417                     |               |           |
| Enable                     | On            |           |
| MicroPDF417                |               |           |
| Enable                     | On            |           |





## **AIM ID Table**

| Barcode                               | AIM ID | Possible AIM ID Parameters |
|---------------------------------------|--------|----------------------------|
| Code 128                              | JC0    |                            |
| UCC/EAN-128                           | ]C1    |                            |
| AIM 128                               | JC2    |                            |
| ISBT 128                              | ]C4    |                            |
| EAN-8                                 | ]E4    |                            |
| EAN-13                                | ]E0    |                            |
| EAN-13 with Addon                     | ]E3    |                            |
| ISSN                                  | JX0    |                            |
| ISBN                                  | JX0    |                            |
| UPC-E                                 | ]E0    |                            |
| UPC-E with Addon                      | ]E3    |                            |
| UPC-A                                 | ]E0    |                            |
| UPC-A with Addon                      | ]E3    |                            |
| Interleaved 2 of 5                    | ]lm    | 0,1,3                      |
| ITF-6                                 | ]lm    | 1,3                        |
| ITF-14                                | ]lm    | 1,3                        |
| Deutsche 14                           | JX0    |                            |
| Deutsche 12                           | JX0    |                            |
| COOP 25 (Japanese Matrix 2 of 5)      | JX0    |                            |
| Matrix 2 of 5(European Matrix 2 of 5) | ]X0    |                            |
| Industrial 25                         | ]\$0   |                            |





| Standard 25 | ]R0 |             |
|-------------|-----|-------------|
| Code 39     | ]Am | 0,1,3,4,5,7 |
| Codabar     | ]Fm | 0,2,4       |
| Code 93     | ]G0 |             |
| Code 11     | ]Hm | 0,1,3       |
| Plessey     | ]P0 |             |
| MSI-Plessey | ]Mm | 0,1         |
| GS1 Databar | ]e0 |             |
| PDF417      | ]Lm | 0,1,2       |
| MicroPDF417 | ]Lm | 3,4,5       |

## Reference:

- 1. ISO/IEC 15424:2008
- 2. Information Technology Auto-Identification and Data Cellection Technology Data Carrier Identifiers (including the symbol identifiers)

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## **CodeID Table**

| 条码类型 Barcode                          | Code ID |
|---------------------------------------|---------|
| Code 128                              | j       |
| UCC/EAN-128                           | u       |
| AIM 128                               | f       |
| ISBT 128                              | t       |
| EAN-8                                 | g       |
| EAN-13                                | d       |
| ISSN                                  | n       |
| ISBN                                  | В       |
| UPC-E                                 | h       |
| UPC-A                                 | С       |
| Interleaved 2 of 5                    | е       |
| ITF-6                                 | r       |
| ITF-14                                | q       |
| Deutsche 14                           | w       |
| Deutsche 12                           | ı       |
| COOP 25 (Japanese Matrix 2 of 5)      | 0       |
| Matrix 2 of 5(European Matrix 2 of 5) | V       |
| Industrial 25                         | i       |
| Standard 25                           | s       |
| Code 39                               | b       |
| Codabar                               | a       |
| Code 93                               | у       |





| Code 11     | z |
|-------------|---|
| Plessey     | Р |
| MSI-Plessey | m |
| GS1 Databar | R |
| PDF417      | Р |
| MicroPDF417 | М |

## **Data Barcode**

After reading the data barcode, please read "save" in the next page to svae the data barcode setup.



























Α



R



C



D



Е



F

## Save and Abort the Setup

After reading the data barcode, please read "save" to save the data. If reading error occurs, except for re-configuration, the costomer can also abort the error data.

If the scanner has read a centain setup barcode, and read numeric data "1", "2", "3"according to priority, after that, If the scanner read "Abort the Last Data", then the last digit "3" will be aborted, if read "Abort a String of Data", then the data "123" will be aborted, if read "Abort the Present Setup", then the data "123" and the setup barcode will all be aborted, and the scanner is still in the state of "Enter Setup Barcode".



Save Data Parameter



Abort the Present Command



Abort one of the Presnet Setup of the Data Parameter



Abort one of the Presnet Setup of the Data Parameter

