## © 2012 by Robin Auto-ID Tech. Co., Ltd. All rights reserved.

Please carefully read the manual before use the product, and effectively to protect the safety of products operation. Please keep this manual after reading properly and save for the next reading.

Do not disassemble the device or tearing the seal label on the device. Otherwise, Robin Auto-ID Tech. Co., Ltd. does not assume responsibility for the warranty or replacement.

The pictures in this manual are for reference only. If the individual picture from the actual product was different with this manual, please refer to actual product. Regarding to the product modification and update, Robin Auto-ID Tech. Co., Ltd. reserves the right to make changes to any software or product to improve reliability, function, or design at any time without notice.

This manual contains all the information is protected by copyright. Any Company and individuals should not in any way or reason for any form of extract, copy, sell all or part of this document without written permission.

Robin Auto-ID Tech. Co., Ltd. No. 1001, 10<sup>th</sup> floor, Aseman Building, Vanak Sqyare, Tehran, Iran Web :<u>http://www.RobinID.com</u>

# **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

# **Table of Contects**

Preface	
Introduction	1
Chapter Descriptions	
Document Set	
Chapter 1 Getting Started	
Introduction	2
Unpacking	2
Product OverView	2
Interface	
Communication Port	
UsingUSB Cable	5
Using RS232 Cable	5
Using PS/2 Cable	6
Remove the Communication Cable	6
Power-on, Power-off, Sleep, Reboot	7
Power-on	7
Power-off	7
Sleep	7
Reboot	
Reading Window Maintenance	7
Reading Depth of Field	
Specification	
Overview	
Left View	
Front View	
Vertical View	10
Barcode Reading	11
Chapter 2 General Configuration	
Introduction	
Setting Barcode	
Setting Command	
Format of Setup Barcode	
Use the Setting Barcodes	
Use the Setup Command	
Setup State	
Setup Protocol	
SetupProcess Flow	
Default Setup	16
Work Mode Selection	
Reading Mode	
Manual Scanning Mode	
Auto Scanning Mode	
Intermittent Reading Mode	
Sense Reading Mode	

Continuous Reading Mode	
Extended Sense Reading Mode	
Command Triggered Reading Mode	
Security Level Setup	
Decoding Sound Setup	
Other Setup	
Activate/Abort Temporary Mute	
Chaper 3 Inquiry Command	
Introduction	
Chapter 4 Communication Setup	
Serial Port Setup	
Baud Rate Setup	
Check Setup	
Stop Bit	
Flow Control Setup	
Data Bit	
USB Function Setup	
USB Virtual Keyboard Function	
USB Virtual Serial Port Function	
Keyboard Function Setup	
Keyboard Layout	
Set the Delay between Characters	
Character Conversion	
Chapter 5 Data Format Setup	
Prefix Sequence Setup	
Custom Prefix	
Add Custom Prefix or Not	
Define the Custom Prefix	
AIM ID Prefix	
Code ID Prefix	
Custom Suffix	
Add Custom suffix or Not	32
	32
End Mark Suffix	
Add End Mark Suffix or Not	
Define the End Mark Suffix	
Chapter 6 Barcode Parameter Setup	
Introduction	
Code 128	
Restore Default Value	
Allow to Read Code 128 or not	
Code ID Setup	
Set the Barcode Reading Length Limit	
UCC/EAN-128	

Restore Default Value	
Allow to Read UCC/EAN-128 or not	
Code ID Setup	
Set the Barcode Reading Length	
AIM 128	
Restore Default Value	
AIM 128 Allow to Read AIM-128 or not	
Code ID Setup	
Set the Barcode Reading Length	
EAN-8	
Restore Default Value	
Allow to Read EAN-8 or not	
Code ID Setup	
Set Whether or not to Read 2-Digit Extracode	
Set Whether or not to Read 5-Digit Extracode	
Set Whether or not to Send the Check Digit	
EAN-13	
Restore Default Value	
Allow to Read EAN-13 or not	
Set Whether or not to Send the Check Digit	
Code IDSetup	
Set Whether or not to Read 2-Digit Extracode	
Set Whether or not to Read 5-Digit Extracode	
Extended Setup	
ISSN	
Restore Default Value	
Allow to Read ISSN or not	
CodeID Setup	
ISBN	
Restore Default Value	
Allow to Read ISBN or not	45
ISBN Data Length Setup	
CodeIDSetup	
Restore Default Value	
Allow to Read UPC-E or not	
Set whether or not to Send the Check Digit	
CodeID Setup	
Set Whether or not to Read 2-Digit Extracode	
Set Whether or not to Transmit the System Character	
Set whener or not to transmit the System Character	
Restore Default Value	
Allow to Pood LIPC A or not	

CodeID Setup					49
Set Whether or not	to Transimit the Check Dig	git			
Set Whether or not 49	t to Transmit the System I	Digit —0∥			
Set Whether or not	to Read 2-Digit Extracode				50
Set Whether or not	to Read 5-Digit Extracode				
Interleaved 2 of 5	-				50
Restore Default Va	lue				50
Allow to Read Inter	leaved 2 of 5 or not				
Code ID Setup					
Set Whether or not	to Transmit the Check Cha	aracter			51
Set the Barcode Re	eading Length				
ITF-6					52
Code ID Setup					53
ITF-14					53
CodeIDSetup					54
Deutsche 14					54
Restore the Default	t Value				54
Allow to Read Deut	tsche14 or not				55
CodeID Setup					55
Deutsche 12					55
Restore the Default	t Value				55
Deutsche 12 Allow	to Read Deutsche 12 or no	ot			56
					56
CodeID Setup	•••••••••••••••••••••••••••••••••••••••		••••••	•••••••••••••••••	
COOP	25(Japanese	Matrix	2	of	5)
COOP  Restore the Default	25(Japanese t Value	Matrix	2 57	of	5) 
COOP COOP Restore the Default Allow to Read COC	25(Japanese t Value )P 25 or not	Matrix	2	of	5) 
COOP COOP Restore the Default Allow to Read COC CodeID Setup	25(Japanese t Value DP 25 or not	Matrix	2 57	of	5) 
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup	25(Japanese t Value DP 25 or not	Matrix	2	of	5) 
COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re	25(Japanese t Value DP 25 or not eading Length	Matrix	2	of	5) 
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5)	Matrix	2	of	5) 
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default	25(Japanese t Value DP 25 or not eading Length Matrix 2 of 5) t Value	Matrix	2	of	5) 57 57 57 57 57 57 57 58 58 59 59
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of	Matrix	2	of	5) 57 57 57 57 57 57 58 59 59 59 59
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of	Matrix	2	of	5) 57 57 57 57 57 57 57 58 59 59 59 59 59 59
COOP COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup	25(Japanese t Value DP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of	Matrix 5	2	of	5) 57 57 57 57 57 57 58 59 59 59 59 59 59 59 59 59 59 59 59 59
CodeID Setup COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length	Matrix 5	2	of	5) 57 57 57 57 57 57 57 58 59 59 59 59 59 59 59 60 60 60
CodeID Setup COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length	Matrix	2	of	5) 57 57 57 57 57 57 58 59 59 59 59 59 59 60 60 60 61
CodeID Setup COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default	25(Japanese t Value DP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length	Matrix	2	of	5) 57 57 57 57 57 57 57 58 59 59 59 59 59 59 59 60 60 60 61 61
CodeID Setup COOP Restore the Default Allow to Read COO CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length t Value t Value t Value	Matrix	2	of	5) 57 57 57 57 57 57 58 59 59 59 59 59 59 59 60 60 60 61 61 61
CodeID Setup COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length t Value t Value	Matrix	2	of	5) 57 57 57 57 57 57 58 59 59 59 59 59 59 60 60 60 61 61 61 61
CodeID Setup COOP Restore the Default Allow to Read COC CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup Check Setup	25(Japanese t Value DP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length t Value t Value t Value	Matrix	2	of	5) 57 57 57 57 57 57 57 58 59 59 59 59 59 59 60 60 60 61 61 61 61 61 61 61 62
CodeID Setup COOP Restore the Default Allow to Read COO CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup Set the Barcode Re	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length tsche 12 or not eading Length	Matrix	2	of	5) 57 57 57 57 57 57 58 59 59 59 59 59 60 60 60 60 61 61 61 61 61 61 61 62 62 62
CodeID Setup COOP Restore the Default Allow to Read COO CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup Set the Barcode Re Industrial 25	25(Japanese t Value DP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length tsche 12 or not eading Length	Matrix	2	of	5) 57 57 57 57 57 58 59 59 59 59 60 60 61 61 61 61 61 61 61 61 61 61 61 62 62 63
CodeID Setup COOP Restore the Default Allow to Read COO CodeID Setup Check Setup Set the Barcode Re Matrix 2 of 5 (European Restore the Default Restore the Default CodeID Setup Check Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup Set the Barcode Re Industrial 25 Restore the Default Allow to Read Deut CodeID Setup Set the Barcode Re Standard 25	25(Japanese t Value OP 25 or not eading Length Matrix 2 of 5) t Value t Setup Value of Matrix2 of eading Length tsche 12 or not eading Length t Value	Matrix	2	of	5) 57 57 57 57 57 59 59 59 59 59 59 60 60 61 62 63 63 63

CodeID Setup	
Check Setup	
Set the Barcode Reading Length	
Code 39	
Restore the Default Value	
Allow to Read Code 39 or not	
CodeID Setup	
Check Setup	
Set whether to Send the start and stop character or not	
Set the Reading Range of ASCII Code	
Set the Barcode Reading Length	
Codabar	
Restore the Default Value	
Allow to Read Codabar or not	
CodeID Setup	
Check Setup	
Start and Stop Character Setup	69
Set the Bereade Boading Length	60
Code 93	
Restore the Default Value	
Allow to Read Code 93 or not	
CodeID Setup	
Check Setup	
Check Setup Set the Barcode Reading Length	
Check Setup Set the Barcode Reading Length Code 11	
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value	
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value Allow to Read Code 11 or not	
Check Setup	
Check Setup	
Check Setup	71         71         71         72         72         72         72         72         72         72         72         73         73
Check Setup	71         71         71         72         72         72         72         72         72         72         72         72         72         72         73         74
Check Setup	71         71         71         72         72         72         72         72         72         72         72         72         72         72         72         73         74         74
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not	71         71         71         72         72         72         72         72         72         72         73         74         74         74         74
Check Setup Set the Barcode Reading Length	71         71         71         72         72         72         72         72         72         72         73         73         74         74         74         75
Check Setup Set the Barcode Reading Length	71         71         72         72         72         72         72         72         72         73         73         74         74         75
Check Setup	71         71         71         72         72         72         72         72         72         72         73         73         74         74         74         75         75         76
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey	71         71         71         72         72         72         72         72         72         73         73         74         74         74         75         76
Check Setup	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not	71         71         71         72         72         72         72         72         72         72         73         73         73         74         74         74         74         75         75         76         76         76         76         76         76
Check Setup Set the Barcode Reading Length Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Check Setup Set the Barcode Reading Length Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Check Setup Set the Barcode Reading Length Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Set the Barcode Reading Length Set the Barcode Reading Length Check Setup Set the Default Value Allow to Read MSI-Plessey or not CodeID Setup Set the Barcode Reading Length	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Check Setup Set the Barcode Reading Length Code 11 Restore the Default Value Allow to Read Code 11 or not CodeID Setup Check Setup Set the Barcode Reading Length Plessey Restore the Default Value Allow to Read Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length MSI-Plessey Restore the Default Value Allow to Read MSI-Plessey or not CodeID Setup Check Setup Set the Barcode Reading Length GS1 Databar	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Check Setup	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

CodeID Setup
PDF417
Restore the Default Value
Allow to Read PDF417 or not
CodeID Setup
MicroPDF417
Restore the Default Value
Allow to Read MicroPDF417 or not
CodeID Setup
Chapter 7 Appendix
Default Setup Table
AIM ID Table
CodeID Table
Data Barcode    93      Save and Abort the Setup    94

# Preface

#### Introduction

This manual provides information about using the RS-1100 series1D barcode cordedscanner:RS-1100. (Hereinafter refer to as — RS1100 corded scannerll)

#### **Chapter Descriptions**

- Chapter1, Getting Started :Generaldescription of RS-1100 corded scanner includeding all the parameters of RS1100corded scanner.
- Chapter2, General Configuration : This chapter introduces the method of how to set the RS1100corded scanner.
   There are two methods, setup barcode and setup command.
- Chapter3, Inquiry Command : This chapter introduces how to inquiry and obtain the information of RS1100 corded scanner by scanning the setup barcode.
- Chapter4, Communication Setup: Serial port parameter setup and USB function setup have been introduced in this chapter.
- Chapter5, Data Format : Introduces how to use the prefix and suffix to satisfy the customers' requirement to obtaining more barcode data.
- Chapter6, Barcode Parameter Setup : In this chapter, all the barcodes which RS1100scanner supports have been listed, and the revelant parameter setup barcodes have been provided.

#### **Document Set**

The documentation set for the RS-1100 corded scanner provides information for specific user needs and includes:

- ♦ RS-1100XX-3E Quick Start Guide operation.
   ♦ RS-1100XX-3E UserGuide : Description how to get the RS1100corded scanner up and basic : This is the manual, description how to use and set the RS1100 corded scanner.
- Software Utilities User Guide
   Description how to use the Robin's scanner utilities software developed tool.

# **Chapter 1 Getting Started**

#### Introduction

RS1100corded 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, RS1100corded scanner is able to perform rapid image acquisitionand and accurate decoding; it can provide the customers with best service. RS1100corded 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 RS1100 corded scanner is included in this chapter with several pictures, if your have a RS1100corded 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 RS1100corded 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**





#### Pin assigmentDefinition 1 of RS1100connector (factory default)

PIN Definition Type Description	
---------------------------------	--

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

#### Pin assigmentDefinition 2 of RS1100connector

PIN	Definition	Туре	Description
1	CLK1	I/O	Keyboard Clock Signal
2	DATA1	1/0	Keyboard Data Signal
3	VCC	Ρ	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	Ρ	Ground
9	D-	I/O	
10	D+	I/O	USB Signal

# **Communication Port**

RS1100must 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



♦ PS/2



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

# UsingUSB Cable



Connecting the RS1100corded scanner with host through USB cable:

- 1 Plug the RJ45 connector into RS1100scanner.
- 2 Plug the USB connector into Host.

# Using RS232 Cable





Connecting the RS1100corded scanner with host through RS232 cable:

- 1 Plug the RJ45 connector into RS1100scanner.
- 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 RS1100scanner.

- 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 RS1100with the host, the RS1100will 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 RS1100no 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
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 Scan Rate	44° 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	
Operation Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	5% ~ 95% (non-condensing)
Static Discharge	±12 kV (Air discharge), ±8 kV (Direct discharge)
Drop	1.5 m drop to concrete
Certificates	

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  $^\circ\!\mathrm{C}$  , Envirment light Illumination = 200 LUX

# Overview

Left View

The picture below is the left view of RS1100 scanner.



#### **Front View**

The picture below is the front view of RS1100 scanner.



#### **Vertical View**

The picture below is the vertical view of RS1100 scanner.



## **Barcode Reading**

- $\diamond$  Make sure the scanner, data cable and power are properly connected before 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 SetupII 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 setting command can be send to the host. Accoring 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 SetupII 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 commandl is only temporarily effective; the scanner will restore to the state of —do not send the setting commandl 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 charaters 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 statell; 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**

- 1. Enter to setup state: To send—\$\$\$\$ to the scanner , reply—@@@@ll when success.
- 2. Exit fromsetup state: To send—%%%% I to the scanner , reply—^^^^ Ilwhen success.
- 3. If you received —^^^^I reply from scanner, that mean the scanner was exit from setup state.
- The format of command is to add— # llin front of each command, and end by— ; ll.
   For example:—#99900030;ll.
- The scanner will reply a success message, by add —!II in front of setting command and end by —;II.
   For example: —!99900030;II.
- The scanner also will reply anerror message, by add —?II in front of setting command and end by —;II.
   For example: —?99900030;II
- 7. The scanner will reply —!xxxxxxx; I and contains in "&{" and "}" the query results, when you sending a query command. For example:

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

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

Description:

The —Firmware v1.7.5;Decoder v1.00.023.C6;|FD25430BI among in "&{" and "}" is the query results. And

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:

 $--\#99904112; \#99900000; \#99900015; \#99900000; \#99900012; \#99900020; \|.$ 

#### **SetupProcess Flow**







# **Default Setup**

**Factory Default Setting** 





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



[Restore

to Factory Default]

Work Mode Selection



[Power Off]



[Reboot]



#### Note:

- 1. Wake up the scanner please pressing trigger.
- 2. 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.







#### [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 start 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.





[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 Setupl barcode.
- 2. Read the -Set the Scanning Time Intervall barcode.
- 3. Read the numeric -1 and '0 barcode.
- 4. Read the -Exit Setupl 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]





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 Scanning Time Intervals]

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

999001	52

【High

Sensitivity]





[Low 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 Setuplbarcode.
- 2. Read the -Custom Sensibilityll barcode.
- 3. Read the numeric —5II barcode.
- 4. Read the -Exit Setupl 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.





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**

After setup, to begin triggered scanning by sending the stop command in the terminal (such as PC) or reading the —Begin Simulating Triggerll. 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 Triggerll, and require a 2-Digit character passback (such as 0A,0X,etc.,)



[Exit Setup]



# 

[Begin Simulating Trigger]



[Commnad Triggered Scanning]

[Stop Simulating Trigger]

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 3]



[Set Security Level to 4

# [Turn off Decoding Audio]

[Intermediate Frequency - Weak]



# **Decoding Sound Setup**





# 

[High Frequency - Laud]









[Intermediate Frequency - Median]

**Other Setup** 

Activate/Abort Temporary Mute



[Low Frequency - Laud]

[High Frequency - Median]

[Low Frequency - Weak]

[High Frequency - Weak]

[150ms Sound Length] [Intermediate Frequency - Laud]



[50ms Sound Length]







ľ

Active Temporary Mute]



[Exit Temporary Mute]





# **Chapter 3 Inquiry Command**

# Introduction

In order to inquire, the RS1100cradle information can feed back to the host by reading the setup barcode.







[Inquire the Serial Number]



[Inquire the Release Date]

[Inquire the Firmware Information]

[Inquire the Product Name]



23

99900032

[Exit Setup] 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.





99902105





【115200】

**Check Setup** 

99902101

【9600】 【1200】

[Start Setup]



【2400】 【4800】



【14400】 【19200】

【38400】 【57600】



99900032







[Odd Check]

Stop Bit



**Flow Control Setup** 







Data Bit

8 Data Bits



[No Check] 99902122 [Even Check]



[2 Stop bits]





RTS\_CTS Flow Control


[Start Setup]



## **USB Virtual Keyboard**

### Function

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

# **USB Function Setup**



USB Virtual Keyboard Function

**USB Virtual Serial Port Function** 



USB Virtual Serial Port Function





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













# **Keyboard Function Setup**

**Keyboard Layout** 









5<sup>th</sup> France







8<sup>th</sup> Norway



3<sup>rd</sup> Danish

9th Spanish



4<sup>th</sup> Finland



11st Britain





6<sup>th</sup> Turkey F

### 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.





Delay Setup Between Characters

**Character Conversion** 



All Capital Letter





99900032



# 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 —ABII, by reading the barcode with data

 $-123 \ensuremath{\mathbb{I}}$  , the scanner adds  $\|AB\|$  before -123 , and the host will receive  $-AB123 \ensuremath{\mathbb{I}}$  .

# 





It is not Allow to Add Custom Prefix



Allow to Add Custom Prefix

### **Define the Custom Prefix**

Read the —Set the Custom PrefixII 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 -CODEII (the hexadecimal value is 0x43/0x4F/0x44/0x45)

- 1. Read the —Start Setupl barcode.
- 2. Read the ISet the Custom PrefixI barcode.
- 3. Read the following number code:  $4\parallel, -3\parallel, -4\parallel, -4\parallel, -4\parallel, -4\parallel, -5\parallel$
- 4. Read the -Savell barcode.
- 5. Read the —Exit Setuplbarcode.

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

### **AIM ID Prefix**

AIM is abbreviation of Automatic Identification Manufacturers II, 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.





Allow to Add AIMID Prefix

# **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



It is not Allow to Add CodeID Prefix

or interpunction.



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	
—ABII, by	99904100
host will	

It is not Allow to Add Custom Suffix

example, it is allowed to add custom suffix and set the suffix to character string reading the barcode with data —123II, the scanner adds IIABII after —123, and the receive —AB123II



Allow to Add Custom Suffix

# Define the Custom suffix

Read the —Set the Custom suffixll 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 —AGEII (the hexadecimal value is 0x41/0x47/0x45)

- 1. Read the —Start Setupl barcode.
- 2. Read the -Set the Custom SuffixII barcode.
- 3. Read the following number code:-4||-1||-4||-7||-4||-5||
- 4. Read the —Savell barcode.





5. Read the -Exit Setupl barcode.

After the setup of —it is allowed to add custom suffixlis finished, by reading any barcode, the scanner will add custom suffix character string —AGEII 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 end mark custom



It is not Allow to Add End Mark Suffix

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



Allow to Add End Mark Suffix

### Define the End Mark Suffix

Read the —Define the End Mark SuffixII first, and then read the every byte of the suffix character string which will be set, according



Set the End Mark Suffix

99904113

hexadecimal value of to priority.

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 -newlinell

- 1. Read the —Start Setupl barcode.
- 2. Read the ISet the End Mark SuffixII barcode.
- 3. Read the —Set the end mark suffix to 0x0D,0x0A ,and make it can be sentll.
- 4. Read the —Savell barcode.
- 5. Read the —Exit Setupl barcode.





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





# **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

Read Code 128 or not



Prohibit Reading Code 128

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

#### Code ID Setup

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



CodeID Setup

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

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.



47



- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode) 4. Read the IISaveII (see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

### Set the Barcode Reading Length Limit

The scanner is only able to read the Code 128 with transmission 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 LimitI to adjust the minimum length limit
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 Setupl barcode.
- 2. Read the barcode of -Set the Minimum Length Limitl.
- 3. Read the numeric barcode —8ll, (see the appendix—numeric barcode)
- 4. Read the ISaveII barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of -Set the Maximum Length Limitl.
- 6. Read the numeric barcode -11.
- 7. Read the numeric barcode —2II.
- 8. Read the ISavell barcode.(see the appendix—numeric barcode)
- 9. Read the -Exit Setupl barcode.

### 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





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-128I, thus, if the scanner is unable to read the UCC/EAN-128, please try to read the setuo barcode —allow to read UCC/EAN-128I.

#### Code ID Setup

To activate the setup function by reading —CodeID setupll, 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 --pll (the hexadcimal value is 0x70):

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 3. Read the numeric barcode --7II, --0II (see the appendix-numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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.





- ♦ Read the barcode of —Set the Minimum Length LimitI to adjust the minimum length limit
- ♦ Read the barcode of —Set the Maximum Length LimitI to adjust the maximum 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 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 Setupl barcode.
- 2. Read the barcode of -Set the Minimum Length Limitll.
- 3. Read the numeric barcode —8ll, (see the appendix—numeric barcode)
- 4. Read the —Savell barcode. (see the appendix—numeric barcode)
- 5. Read the barcode of -Set the Maximum Length Limitl.
- 6. Read the numeric barcode —1I.
- 7. Read the numeric barcode —2II.
- 8. Read the —Savell barcode.(see the appendix—numeric barcode)
- 9. Read the -Exit Setupl 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









Prohibit Reading AIM-128

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

#### Code ID Setup

To activate the setup function by reading —CodeID setupII, 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 -pll (the hexadcimal value is 0x70):

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

#### Set the Barcode Reading Length

The scanner is only able to read the AIM-128 whose transmission 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 LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI to adjust the maximum 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 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 Setupl barcode.
- 2. Read the barcode of -Set the Minimum Length Limitll.
- 3. Read the numeric barcode —8ll, (see the appendix—numeric barcode)
- 4. Read the \_Savell barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of -Set the Maximum Length LimitII
- 6. Read the numeric barcode —1II.
- 7. Read the numeric barcode —2II.
- 8. Read the \_Savell barcode.(see the appendix—numeric barcode)
- 9. Read the —Exit Setupl 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-8II, thus, if the scanner is unable to read the EAN-8, please try to read the setuo barcode —allow to read EAN-8II.

### Code ID Setup

To activate the setup function by reading —CodeID setupll, 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 --pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 3. Read the numeric barcode -7II, -0II (see the appendix-numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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.





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.





Allow to Read 5- Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

By setting —Allow to Read 2-Digit Extracodell, 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 Extracodell, 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.





Do not Transmit the Check Digit

# 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-13II, thus, if the scanner is unable to read the EAN-13, please try to read the setuo barcode —allow to read EAN-13II.

#### 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

To activate the setup function by reading —CodeID SetupII, 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 EAN-13 to -pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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 99910506 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 99910511 Allow to Read 5-Digit Extracode

The Barcode Must Include 5-Digit Extracode

#### Note:

- By setting —Allow to Read 2-Digit Extracodell, 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 Extracodell, 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 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





# CodeID Setup

To activate the setup function by reading —CodeID setupII, 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 —pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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









Prohibit Reading ISBN

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

### **ISBN Data Length Setup**





### CodelDSetup

To activate the setup function by reading —CodeID setupII, 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 --pll (the hexadcimal value is 0x70).

1. Read the —Start Setupl barcode.

2. Read the —CodeID SetupI barcode.

- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

### 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-EII, thus, if the scanner is unable to read the UPC-E, please try to read the setuo barcode —allow to read UPC-EII.

### 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 all the 8 digit.





Do not Send the Check Digit

### **CodeID Setup**

To activate the setup function by reading —CodeID setupII, 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 UPC-Eto —pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the -Exit Setupl 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.









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.





Allow to read the 5-Digit Extracode



The Barcode Must Include 5-Digit Extracode

#### Note:

- By setting —Allow to Read 2-Digit Extracodell, 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 Extracodell, 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 Transmit the System Character "0"

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





Allow to Read 2-Digit Extracode





Do not Transmit System Character —01 99911014 Transmit System Character —01

#### **Extension Setup**

- ↔ —Do not Extend the Barcode Information means keep the original barcode type and data bit,
- ♦ —Extend the Barcode Information into UPC-All means extend the data bit and leave the barcode type unchanged.
- ↔ —Extend the Barcode Information and Type into UPC-All 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**

#### **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





to

UPC-A

Prohibit Reading UPC-A

Read

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

### **CodeID Setup**





To activate the setup function by reading —CodeID setupl, 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 —pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 3. Read the numeric barcode -71, -01 (see the appendix-numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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.





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 -01.



Do not Transmit System Character ---01



Transmit System Character -01

#### Set Whether or not to Read 2-Digit Extracode

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









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





Allow to Read 5-Digit Extracode



The Barcode Must Include 5-Digit Extracode

Note:

- ♦ By setting —Allow to Read 2-Digit Extracodell, 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 Extracodell, 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 Extracodell, 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 2-Digit Extracode







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 5II, 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 5II.

### Code ID Setup

To activate the setup function by reading —CodeID setupl, 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 --pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the -Exit Setupl 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 Checkll, the scanner will transmit all the barcode data.
- Set —Check but do not Send Check Digitl, 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 failedll.
- Set —Check and Send Check DigitI 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 failedII.









Check but do not Transmit the Check Character



Check and Transmit Check Character

Note: by setting —do not send the check digitl, 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 digitl, 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.

- ♦ Read the barcode of —Set the Minimum Length LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 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.







Default Setup Value of ITF-6



Prohibit Reading ITF-6





Allow to Read

Restore the

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 setupl, then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



#### CodeID Setup

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

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the -Exit Setupl 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



Prohibit Reading ITF-14

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



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.

#### CodeIDSetup

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



#### CodeID Setup

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

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the -Exit Setupl 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 Deutsche14I, thus, if the scanner is unable to read the Deutsche14, please try to read the setuo barcode —allow to read Deutsche14I. 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 setupl, then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



CodeID Setup

Example: Set the CodeID ofDeutsche14 to --pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupII barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the -Exit Setupl 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 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 Deutsche12l, thus, if the scanner is unable to read the Deutsche12, please try to read the setuo barcode —allow to read Deutsche12ll. 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 setupl, then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



#### CodeID Setup

Example: Set the CodeID ofDeutsche12to ---pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the —Exit Setupl 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





Prohibit Reading COOP25

Note: the scanner will become unable to read COOP25 by reading the setup barcode —Prohibit Reading UCC/EAN-128I, thus, if the scanner is unable to read the COOP25, please try to read the setuo barcode —allow to read COOP25I.

### **CodeID Setup**

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



Example: Set the CodeID ofCOOP25to ---pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the —CodeID SetupII barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the -Exit Setupl 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 CheckII, the scanner will transmit all the barcode data.
- Set —Check but do not Send Check digitll, 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.





Check and Send Check Digit



Check but do not Send Check Digit

Note: by setting —do not send the check digitl, 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 COOP25(JapaneseMatrix2 of 5) to 4 characters and —do not send check digitl, 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 limit.



barcode of —Set the Minimum Length Limitll to adjust the minimum length

Read the barcode of —Set the Maximum Length LimitII to adjust limit.



the maximum length

99911706

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 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





Prohibit Reading Matrix2 of 5

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

#### **CodeID Setup**

To activate the setup function by reading —CodeID setupll, 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 --pll (the hexadcimal value is 0x70).

1. Read the —Start Setupl barcode.





- 2. Read the —CodeID SetupII barcode.
- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode)
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the —Exit Setupl 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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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.







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

- ♦ Read the barcode of —Set the Minimum Length LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 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





Prohibit Reading Industrial 25

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

#### **CodeID Setup**

To activate the setup function by reading —CodeID setupII, 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 —pll (the hexadcimal value is 0x70).





#### **Check Setup**

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the —Exit Setupl barcode.

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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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 digitI 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 failedII





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

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 LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI to adjust the maximum length limit.







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.

# 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

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 setupII, 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 --pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.





#### **Check Setup**

- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

#### Read — Exit Setup Barcodell

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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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 digitIl 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





Check and Send Check digit



Check but do not Send Check digit

Note: by setting —do not send the check digitl, 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 Standard 25 to 4 characters and —do not send check digitl, in such circumstances, the scanner is not able to read the Standard 25 with 4 characters.)

## Set the Barcode Reading Length

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 LimitI to adjust the minimum length limit
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 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 39I, thus, if the scanner is unable to read the Code 39, please try to read the setuo barcode —allow to read Code 39I.

## CodeID Setup

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



Code ID Setup

Example: Set the CodeID ofCode39to ---pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.





#### **Check Setup**

- 3. Read the numeric barcode -7II, -0II (see the appendix-numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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.

- ♦ Set —No CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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 digitII 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 failedII





Check and Send Check digit



Check but do not Send Check digit

Note: by setting —do not send the check digitl, 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 digitl, 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 —\*Ilbefore 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 off the Function of Reading Full ASCII



Turn on the Function of Reading Full ASCII

# Set the Barcode Reading Length





The scanner is only able to read the Code 39 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 Code 39 exceeds the range can not be read or transmitted.

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



Set the Minimum Length Limit

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 Setupl barcode.
- 2. Read the barcode of —Set the Minimum Length Limitll.
- 3. Read the numeric barcode —8ll, (see the appendix—numeric barcode)
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the barcode of -Set the Maximum Length Limitll.
- 6. Read the numeric barcode -11.
- 7. Read the numeric barcode -2II.
- 8. Read the -Savell barcode.(see the appendix-numeric barcode)
- 9. Read the —Exit Setupl barcode.

## Codabar

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

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



Restore the Default Setup Value of Codabar

Allow to Read Codabar or not









Prohibit Reading Codabar

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

#### **CodeID Setup**

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



#### Code ID Setup

Example: Set the CodeID ofCodabarto ---pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the -Exit Setupl barcode.

#### **Check Setup**

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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitl, 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 failedll
- Set —Check and Send Check digitI 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 failedII





Check and Send Check Digit







Check but do not Send Check Digit

Note: by setting —do not send the check digitl, 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 digitl, in such circumstances, the scanner is not able to read the Codabar with 4 characters.)

## Start and Stop Character Setup







Send the Start and Stop Character



Set —ABCD/ABCDII as the Start and Stop Character



Set —ABCD/TN\*EII as the Start and Stop Character

Set -abcd/abcdll as the Start and Stop Character



Set -abcd/tn\*ell 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 LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 the maximum length; if the maximum length equals to the minimum length, then the scanner is only able to read the barcode with 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 Setupl barcode.
- 2. Read the barcode of -Set the Minimum Length Limitll.
- 3. Read the numeric barcode —8II, (see the appendix—numeric barcode)
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the barcode of -Set the Maximum Length Limitl.
- 6. Read the numeric barcode -11.
- 7. Read the numeric barcode -21.
- 8. Read the —Savell barcode.(see the appendix—numeric barcode)
- 9. Read the —Exit Setupl barcode.

## Code 93

#### **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 93II, thus, if the scanner is unable to read the Code 93, please try to read the setuo barcode —allow to read Code 93II.

#### **CodeID Setup**





To activate the setup function by reading —CodeID setupll, 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 ---pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 3. Read the numeric barcode -71, -01 (see the appendix-numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl 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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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 digitI 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 failedII







Check but do not Send Check Digit

Note: by setting —do not send the check digitll, 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 93 to 4 characters and —do not send check digitll, 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 LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 11

## **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



Code 11



Prohibit Reading Code 11

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



Allow to Read



#### **CodelD Setup**

To activate the setup function by reading —CodeID setupl, 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 --pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the -Exit Setupl 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 Checkll, the scanner will transmit all the barcode data.

No Check



Two Digits Check, MOD11/MOD11





One Digit Check, MOD11



Two Digits Check, MOD11/MOD9





MOD11/MOD11 Double Check (Len>10)

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



Do not Send the Check Digit

Send the Check Digit

Note: by setting —do not send the check digitl, 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 digitl, 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 LimitI to adjust the minimum length limit.
- ♦ Read the barcode of —Set the Maximum Length LimitI to adjust the maximum 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 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 Setupl barcode.
- 2. Read the barcode of -Set the Minimum Length Limitl.
- 3. Read the numeric barcode —8II, (see the appendix—numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the barcode of -Set the Maximum Length Limitl.
- 6. Read the numeric barcode —1II.
- 7. Read the numeric barcode —2II.
- 8. Read the —Savell barcode.(see the appendix—numeric barcode)





9. Read the -Exit Setupl barcode.

## 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 Plesseyll, thus, if the scanner is unable to read the Plessey, please try to read the setuo barcode —allow to read Plesseyll.

## **CodeID Setup**

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



Code ID Setup

Example: Set the CodeID ofPlesseyto —pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the —CodeID SetupI barcode.
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the -Exit Setupl 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 CheckII, the scanner will transmit all the barcode data
- Set —Check but do not Send Check digitll, 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 failedll
  Set —Check and Send Check digitll 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 failedll





Check and Send Check digit



Check but do not Send Check digit

Note: by setting —do not send the check digitl, 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 digitl, 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.

- ♦ Read the barcode of —Set the Minimum Length LimitI to adjust the minimum length limit.
- $\diamond$  Read the barcode of —Set the Maximum Length LimitII 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-Plesseyll, thus, if the scanner is unable to read the MSI-Plessey, please try to read the setuo barcode —allow to read MSI-Plesseyll.

#### **CodeID Setup**

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



Code ID Setup

Example: Set the CodeID of MSI-Plesseyto ---pl (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 3. Read the numeric barcode -71, -01 (see the appendix-numeric barcode)
- 4. Read the -Savell barcode.(see the appendix-numeric barcode)
- 5. Read the -Exit Setupl 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 Checkll, the scanner will transmit all the barcode data









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 LimitI to adjust the minimum length limit
- ♦ Read the barcode of —Set the Maximum Length LimitI 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 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.





# **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 Databarll, thus, if the scanner is unable to read the GS1 Databar, please try to read the setuo barcode —allow to read GS1 Databarll.

## **CodeID Setup**

To activate the setup function by reading —CodeID setupl, 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 --pll (the hexadcimal value is 0x70).

- 1. Read the -Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 3. Read the numeric barcode —7II, —0II (see the appendix—numeric barcode)
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

# PDF417

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





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



Restore the Default Setup Value of PDF417

## Allow to Read PDF417 or not





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 setupl, then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofPDF417to ---pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the —CodeID SetupII barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode)
- 5. Read the —Exit Setupl barcode.

# MicroPDF417

#### **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





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 setupll, then read the hexadcimal value inaccordance with the character which will be set to the CodeID.



Code ID Setup

Example: Set the CodeID ofMicroPDF417to ---pll (the hexadcimal value is 0x70).

- 1. Read the —Start Setupl barcode.
- 2. Read the -CodeID SetupI barcode.
- 4. Read the —Savell barcode.(see the appendix—numeric barcode) 5. Read the —Exit Setupl barcode.





# **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 AIMID Prefix	Off	]Cm Symbol
Add CodelD	Off	1 or 2 Character, Captital or 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		

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 Character	On	Select one

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	]C0	
UCC/EAN-128	]C1	
AIM 128	JC2	
ISBT 128	]C4	
EAN-8	]E4	
EAN-13	JEO	
EAN-13 with Addon	]E3	
ISSN	JX0	
ISBN	JX0	
UPC-E	JEO	
UPC-E with Addon	JE3	
UPC-A	JEO	
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	]X0	





Deutsche 12	JX0	
COOP 25 (Japanese Matrix 2 of 5)	JX0	
Matrix 2 of 5(European Matrix 2 of 5)	JX0	
Industrial 25	]S0	
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)

# **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	e
ITF-6	r
ITF-14	q
Deutsche 14	w
Deutsche 12	1
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	а
Code 93	у
Code 11	z





Plessey	q
MSI-Plessev	m
GS1 Databar	R
PDF417	Р
MicroPDF417	М

# Data Barcode

After reading the data barcode, please read —savell in the next page to svae the data barcode setup.




























## Save and Abort the Setup

After reading the data barcode, please read —savell 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  $-1\parallel$ ,  $-2\parallel$ ,  $-3\parallel$  according to priority, after that, If the scanner read —Abort the Last Datall, then the last digit  $-3\parallel$  will be aborted, if read —Abort a String of Datall, then the data  $-123\parallel$  will be aborted, if read —Abort the Present Setupl, then the data  $-123\parallel$  and the setup barcode will all be aborted, and the scanner is still in the state of —Enter Setup Barcodell.





Abort the Present Command

Abort one of the Presnet Setup of the Data Parameter



Abort one of the Presnet Setup of the Data Parameter



