

BAR CODE

PROGRAMMING MENU

A large, stylized barcode graphic composed of numerous vertical black bars of varying widths, creating a dense, textured effect that fills the lower half of the page. The text "PROGRAMMING MENU" is overlaid on this graphic, tilted diagonally to follow the angle of the bars.

Programming Menu

V3.9

Notice

The manufacturer shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages in connection with the furnishing, performance or use of use the publication.

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Chapter 1 Description

1.1 General

Thank you for purchasing this barcode scanner with an advanced and versatile decoder. The decoder works with variety of barcode types, reading devices, and computer interfaces. It discriminates over twenty different symbologies automatically.

This menu provides an easy way to configure the decoding options and interface selections by scanning bar codes listed in the menu.

FCC Approval



This device had been tested in accordance with the procedures and in compliance with Part 15 Subpart B of FCC Rules. And keeps all requirements according ANSI C63.4 & FCC Part 15 B Regulation and CISPR22 Class B.

CE Standards



The CE mark as shown here indicates this product had been tested in accordance with the procedures given in European Council Directive 2004/108/EC and confirmed to comply with the Europe Standard EN55022:2006:Class B, EN 55024:1998+A1:2001+A2:2003,IEC61000-3-2:2006, IEC61000-3-3:1995+A1:2005,IEC61000-4-2:2001, IEC61000-4-3:2006,IEC61000-4-4:2004,IEC61000-4-5:2006,IEC61000-4-6:2001,IEC61000-4-8:2001,IEC61000-4-11:2004.

LEGISLATION AND WEEE SYMBOL

This marking shown on the product or its literature, indicates that it should not be disposed with other households wastes at the end of its working life. To prevent possible harm to the environment or human healthy from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable re-use of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their suppliers and check the terms and conditions of the purchase

1.2 Introduction

The Decoder is an advanced and versatile decoding facility for barcoding systems .It works with variety of bar code types, reading devices, and computer interfaces. It discriminates about twenty different symbologies automatically.

This manual provides an easy way to configure the decoding options and interface selections by scanning bar codes listed in the menu.

1.3 Codes Read

. Codes Read

All UPC/EAN/JAN, Code 39, Code 39 Full ASCII, Code 128, Interleave 25, Industrial 25, Matrix 25, CODABAR/NW7, Code 11, MSI/PLESSEY, Code 93, China Postage, Code32 / Italian Pharmacy, others available upon request.

1.4 Installation

Unpacking -

Remove the scanner from its packing and check it for damage. If the scanner was defected in transit, please contact your vendor immediately. Be sure that you keep the packing with all accessories contains in the package for your returning of service.

Connecting the scanner -

Keyboard wedge / RS-232C / USB:

Connect the 10-pins RS-45 male connector into the bottom of the scanner and you will hear a “click” when the connection is made.

Power supply for RS-232C scanner -

There are 3 ways to supplying the power, use external +5V power supply, use optional power cable (KBDC) which taking the power from KB wedge or if the host supports +5V power from pin 9.

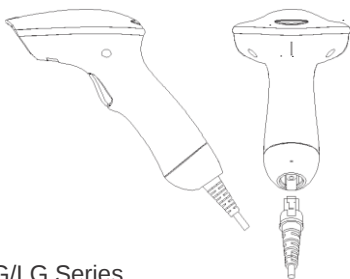
Installing the scanner to the Host System -

1. Turn off the host system.
2. Connect the power if needed.
3. Connect to the proper port on the host system.
4. Turn on the host system.

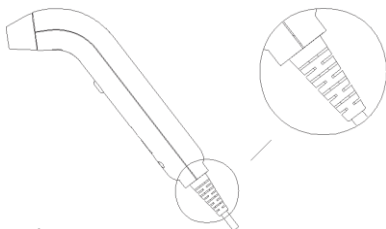
Switching cable -

Before removing the cable from the scanner, it is recommended that the power on the host system is off and the power supply has been disconnected from unit.

1. Find the small "Pin-hole" on the bottom of the unit.
2. Use a bended regular paperclip and insert the tip into the hole.
3. You will hear a "click", then gentle on the strain-relief of the cable and it will slide out of the scanner.



SG/LG Series



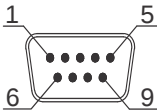
SD Series

1.5 Pin Assignment

A> Input Port for Mini Decoder

DB 9 Male

Pin No.	Wand / Slot Reader	CCD / Laser Scanner
1	N.C.	S.O.S.
2	DATA	DATA
3	N.C.	N.C.
4	N.C.	N.C.
5	N.C.	TRIGGER
6	N.C.	P. E.
7	GND	GND
8	SHIELD	SHIELD
9	+5V	+5V

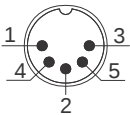


B> Output Port

1. PC Keyboard Output

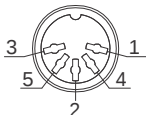
DIN 5 MALE

Pin No.	Function
1	HOST CLK
2	HOST DATA
4	GND
5	Vcc(+5V)



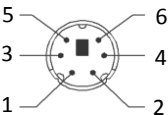
DIN 5 FEMALE

Pin No.	Function
1	KB CLK
2	KB DATA
4	GND
5	Vcc(+5V)



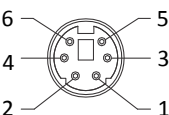
MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA
3	GND
4	Vcc
5	HOST CLK



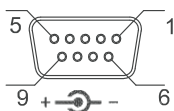
MiniDIN 6 FEMALE

Pin No.	Function
1	KB DATA
3	GND
4	Vcc
5	KB CLK



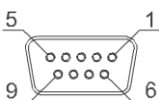
2. RS-232 Output DB 9 Female

Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
Power Lead	Vcc (+5V)



3. WAND Emulation Output DB 9 Female

Pin No.	Function
2	DATA
7	GND
9	Vcc (+5V)



4. ADB Interface MiniDIN 4 MALE

Pin No.	Function
1	ADB
3	Vcc
4	GND



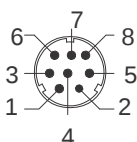
MiniDIN 4 FEMALE

Pin No.	Function
1	ADB
3	Vcc
4	GND



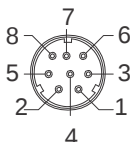
5. NEC 9801 Interface MiniDIN 8 MALE

Pin No.	Function
1	RST
2	GND
3	HOST RDY
4	HOST DATA
5	RTY
8	+5V



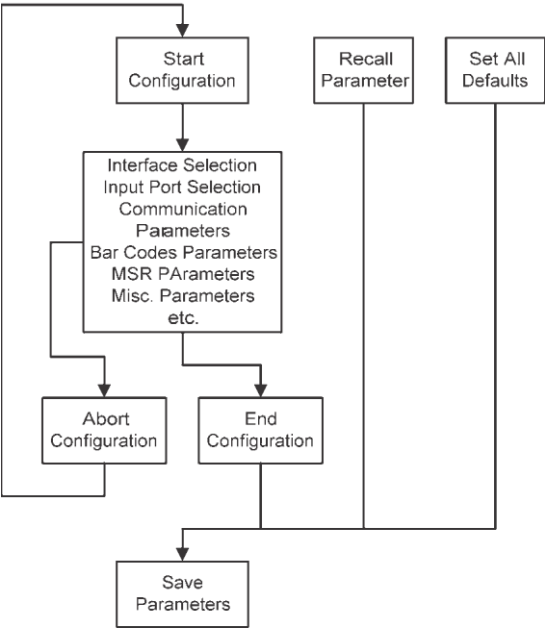
MiniDIN 8 FEMALE

Pin No.	Function
1	RST
3	GND
4	KB RDY
5	KB DATA
4	RTY
5	+5V



Chapter 2 Configuration - General

2.1 Flow Chart



2.2 Loop of Programming

The philosophy of programming parameters has been shown on the flow chart of 2.1. Basically user should

1. Scan Start of Configuration.
2. Scan all necessary labels for parameters that meet applications.
3. Scan End of Configuration to end the programming.
4. To permanently save the settings you programmed, just scan label for Save Parameters.
5. To go back to the Default Settings, just scan label for Set All Defaults.

2.3 Factory Default Settings

The factory default settings are shown with <> and bold in the following sections. You can make your own settings by following the procedures in this manual. If you want to save the settings permanently, you should scan the label of “Save Parameters” in chapter 2.4, otherwise the settings will not be saved after the decoder power is off, and all settings will go back to previous settings.

By scanning “Set All Default” label, the settings will go back to the factory default settings.

2.4 Main Page of Configuration

Save Parameters



/%\$+/0

Recall Stored Parameters



/%\$+/ 1

Set All Defaults



/%\$+/ 2

Start Configuration



/%\$+/ 3

End Configuration



/%\$+/ 4

Abort Configuration



/%\$+/ 6

Version Information



/%\$+/ 5

Save Parameters -

The parameter settings will be saved permanently.

Recall Stored Parameters -

Replace the current parameters by the parameters you saved last time.

Set All Defaults -

Set all the parameters to the factory default settings.

Abort Configuration -

Terminate current programming status.

Version Information -

Display the decoder version information and date code.

Chapter 3 Interface and Reading Mode Selection

3.1 Interface Selection

<Keyboard Mode>



%00 U0

RS232 Mode



%00 U8

WAND Emulation



%00 M2

USB Mode



%0 X08

3.2 Reading Mode Selection

<Good Read OFF>



%0271

Trigger ON/OFF



%0270

Continuous/Trigger OFF



%0272

Testing



%0275

Continuous/Auto Power On



%0273

Flash



%0274

Flash/Auto Power On



%0276

Reserved1



%0277

Auto Sense(Optional)



%09F8

Reserved3



%09F9

Reserved4



%09FA

Reserved5



%09FB

Ch.4 Communication Parameters

4.1 RS232 Communication Parameters

A> Set Up BAUD Rate

2400



%0Y72

1200



%0Y71

4800



%0Y73

<9600>



%0Y77

19200



%0Y74

38400



%0Y75

B> Set Up Data Bits

7 Data Bits



%0Y80

<8 Data Bits>



%0Y88

C> Set Up Stop Bits

<1 Bit>



%0Y08

2 Bits



%0Y00

D> Set Up Parity

<None>



%0YN7

Even



%0YN 2

Odd



%0YN3

Mark



%0YN1

Space



%0 YN0

E Handshaking

RTS/CTS Enable



%0188

<RTS/CTS Disable>



%0180

ACK/NAK Enable



%0144

<ACK/NAK Disable>



%0140

XON/XOFF Enable



%03 K4

<XON/XOFF Disable>



%03 K0

4.2 Keyboard Wedge Mode Parameters

A > Terminal Type

<IBM PC/AT, PS/2>



%0ZF0

IBM PC/XT



%0ZF1

IBM PS/2 25, 30



%0ZF2

NEC 9800



%0ZF3

Apple Desktop Bus(ADB)



%0ZF4

IBM 5550



%0ZF5

IBM 122 Key (1)



%0ZF6

IBM 102 Key



%0ZF7

IBM 122 Key (2)



%0ZF8

Reserved 1



%0ZF9

Reserved 2



%0ZFA

Reserved 3



%0ZFB

Reserved 4



%0ZFC

Reserved 5



%0ZFD

B> Upper/Lower Case

<No Change>



%0330

Upper Case



%0331

Lower Case



%0332

C> Caps Lock Detection

Enable



%0X88

<Disable>



%0X80

D> Send Character by ALT Method

Enable



%0308

<Disable>



%0300

E> Select Numerical Pad

ON



%01K4

<OFF>



%01K0

4.3 Output Characters Parameters

A> Select Terminator

<CR+LF>



%7S2+

None



%7S7+

CR



%7S0+

LF



%7S1+

Space



%7S4+

HT(TAB)



%7S3+

STX-ETX



%7S5+

B> Time-out Between Characters

<0 ms>



%0070

5 ms



%0071

10 ms



%0072

25 ms



%0073

50 ms



%0074

100 ms



%0075

200 ms



%0076

300 ms



%0077

4.4 Wand Emulation Mode Parameters

A> TTL Level Representation

<Bar Equals High>



Bar Equals Low



B> Scan Speed Selection

<Fast>



Slow



C> Output Format Selection

<Output as Code 39>



Output as Code 39
Full ASCII



Output as Original
Code Format



Ch.5 Bar Codes & Others

5.1 Symbolologies Selection

UPC-A <ON>



%0A44

OFF



%0A40

UPC-E <ON>



%0B08

OFF



%0B00

EAN-13/JAN-13/ISBN-13
<ON>



%0A22

OFF



%0A20

EAN-8/JAN-8 <ON>



%0A11

OFF



%0A10

CODE 39 <ON>



%0E08

OFF



%0E00

CODE 128 <ON>



%0F08

OFF



%0F00

CODABAR/NW7 <ON>



%0J08

OFF



%0J00

Interleave 25 <ON>



%0GO8

OFF



%0GO0

Industrial 25 ON



%0HO8

<OFF>



%0HO0

Matrix 25 ON



%0I O8

<OFF>



%0I O0

CODE 93 ON



%0K O8

<OFF>



%0K O0

CODE 11 ON



%0LO8

<OFF>



%0L O0

China Postage ON



%CMO8

<OFF>



%0MO0

MSI/PLESSEY ON



%CNO8

<OFF>



%0NO0

Code 2 of 6ON



<OFF>



LCD25 ON



<OFF>



Telepen ON



<OFF>



Reserved5 ON



<OFF>



Reserved6 ON



<OFF>



GS1 DataBar Omnidirectional ON



%0U08

<OFF>



%0U00

GS1 DataBar Limited ON



%0V08

<OFF>



%0V00

GS1 DataBar Expanded ON



%0W08

<OFF>



%0W00

Select All Bar Codes



%1A/+

5.2 UPC/EAN/JAN Parameters

A Reading Type

UPCA=EAN13 ON



%0AK4

ISBN-1C Enable



%0B88

ISSN Enable



%0B44

Decode with Supplement



%0100

Expand UPC-E
Enable



%0BH1

EAN8=EAN13
Enable



%0AO8

GTIN Format
Enable



%0X44

UPCA=EAN13<OFF>



%0AK0

ISBN-13 <Enable>



%0B80

ISSN <Disable>



%0B40

<Auto discriminate
Supplement>



%0108

Expand UPC-E
<Disable>



%0BH0

EAN8=EAN13
<Disable>



%0AO0

GTIN Format
<Disable>



%0X40

B> Supplemental Set Up

<Not Transmit>



%0B33

Transmit 5 Code



%0B32

Transmit 2 Code



%0B31

Transmit 2&5 Code



%0B30

C> Check Digit Transmission

UPC-A Check Digit Transmission <ON>



%0A12

OFF



%0A10

UPC-E Check Digit Transmission <ON>



%0B12

OFF



%0B10

EAN-8 Check Digit Transmission <ON>



%0A88

OFF



%0A80

EAN-13 Check Digit Transmission <ON>



%0AH1

OFF



%0AH0

ISSN Check Digit Transmission <ON>



%0BK4

OFF



%0BK0

5.3 Code 39 Parameters

A> Type of Code

<Standard>



%0EH1

Full ASCII



%0EH0

Italian Pharmacy/Code 32

<OFF>



%0E80

Italian Pharmacy/
Code 32 ON



%0E88

B> Check Digit Transmission

**<Do Not Calculate
Check Digit>**



%0EM 2

Calculate Check Digit
& Transmit



%0EM 6

Calculate Check Digit
& Not Transmit



%0EM 4

C> Output Start/Stop Character

Enable



%0E4 4

<Disable>



%0E4 0

D> Decode Asterisk

Enable



%0E22

< Disable>



%0E20

E> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
 2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
 3. Scan the “Complete” label of the desired set.
- Repeat the steps 1 - 3 to set additional lengths.

<Variable>



%4E1 +

Fix Length (2 Sets Available)

1. 1st Set Begin



%4E00

2. Decimal Value
(Appendix A)

3. 1st Set Complete



%4E01

1. 2nd Set Begin



%4E00

2. Decimal Value
(Appendix A)

3. 2nd Set Complete



%4E02

Minimum Length

1. Begin



%2+ - /

2. Decimal Value
(Appendix A)

3. Complete



%2C0+

5.4 Code 128 Parameters

A> Reading Type

UCC/EA1-128
Enable



%0F44

<Enable']C1'Code
Format>



%0F22

<Enable Code128
Group Separators(GS)>



%0F11

<UCC/EA1-128
Disable>



%0F40

Disable']C1'Code
Format



%0F20

Disable Code128
Group Separators(GS)



%0F10

B> Check Digit Transmission

Do Not Calculate
Check Digit



%0FN1

<Calculate Check
Digit& Not Transmit>



%0FN5

Calculate Check
Digit & Transmit



%0FN7

C> Append FNC2

ON



%0F88

<OFF>



%0F80

D> Set Up Code Length

To set the fixed length

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



%4E1+

Fix Length (2 Sets Available)

1. 1st Set Begin



%4F00

2. Decimal Value
(Appendix A)

3. 1st Set Complete



%4F01

1. 2nd Set Begin



%4F00

2. Decimal Value
(Appendix A)

3. 2nd Set Complete



%4F02

Minimum Length

1. Begin



%2+- /

2. Decimal Value
(Appendix A)

3. Complete



%2C1+

5.5 Interleave 25 Parameters

A> Check Digit Transmission

<Do Not Calculate
Check Digit>



%0GN3

Calculate Check Digit
& Transmit



%0GN7

Calculate Check Digit
& Not Transmit



%0GN5

B Set Up Number of Character

<Even>



%0G88

Odd



%0G80

C Brazilian Banking Code

<Disable>



%0G40

Enable



%0G44

D> Set 8p Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available>

1.1st Set Beg



2. Decimal Value (Appendix A)

3. 1st Set Complete



1.2nd Set Begin



2. Decimal Value (Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value (Appendix A)

3. Complete



5.6 Industrial 25 Parameters

A> Reading type

IATA25 Enable



%0H44

<Disable>



%0H40

B Check Digit Transmission

<Do Not Calculate Check Digit>



%0HN3

Calculate Check Digit
& Transmit



%0HN7

Calculate Check Digit & Not Transmit



%0HN5

C> Set Up Code Length

To set the fixed length

1. Scan the “Begin” label of the desired set.
2. Go the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value (Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value (Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value (Appendix A)

3. Complete



5.7 Matrix 25 Parameters

A> Check Digit Transmission

<Do Not Calculate
Check Digit>



%0IN3

Calculate Check Digit
& Transmit



%0IN7

Calculate Check Digit
& Not Transmit



%0IN5

B> Set Up Code Length

To set the fixed length:

1. Scan the “Begin“ label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete“ label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value (Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value (Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value (Appendix A)

3. Complete



5.8 CODABAR/NW7 Parameters

A> Set Up Start/Stop Characters Upon Transmission

ON



%C J H1

<OFF>



%0J H0

B> Transmission Type of Start/Stop

<A/B/C/D> <Start>



%04 V F

<A/B/C/D> <Stop>



%04 FF

A Start



%04 V1

A Stop



%04 F1

B Start



%04 V2

B Stop



%04 F2

C Start



%04 V4

C Stop



%04 F4

D Start



%04 V8

D Stop



%04 F8

C> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value
(Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value
(Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value
(Appendix A)

3. Complete



5.9 Code 93 Parameters

A> Check Digit Transmission

<Calculate Check 2 Digits
& Not Transmit>



Do Not Calculate
Check Digit



B> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value (Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value (Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value (Appendix A)

3. Complete



5.10 Code 11 Parameters

A> Check Digit Transmission

<Do Not Calculate
Check Digit>



%0LN3

Calculate Check 1
Digit & Transmit



%0LN7

Calculate Check 2 Digits
& Not Transmit



%0LN5

Calculate Check 2
Digits & Transmit



%0LN6

Calculate Check 2 Digits
& Not Transmit



%0LN4

B> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value (Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value (Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value (Appendix A)

3. Complete



5.11 MSI/PLESSEY Code Parameters

A> Check Digit Transmission

Do Not Calculate
Check Digit



%0NN3

Calculate Check Digit
& Transmit



%0NN7

<Calculate Check Digit
& Not Transmit>



%0NN5

B> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



%4 N1 +

Fix Length (2 Sets Available)

1. 1st Set Begin



%4 N0 0

2. Decimal Value (Appendix A)

3. 1st Set Complete



%4 N0 1

1. 2nd Set Begin



%4 N0 0

2. Decimal Value (Appendix A)

3. 2nd Set Complete



%4 N0 2

Minimum Length

1. Begin



%2 + - /

2. Decimal Value (Appendix A)

3. Complete



%2 C9 +

5.12 Code 2 of 6 Parameters

A> Check Digit Transmission

<Do Not Calculate
Check Digit>



%0 PN3

Calculate Check
Digit & Transmit



%0PN7

Calculate Check Digit
& Not Transmit



%0PN5

B> Set Up Code Length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fix Length (2 Sets Available)

1. 1st Set Begin



2. Decimal Value
(Appendix A)

3. 1st Set Complete



1. 2nd Set Begin



2. Decimal Value
(Appendix A)

3. 2nd Set Complete



Minimum Length

1. Begin



2. Decimal Value
(Appendix A)

3. Complete



5.13 LCD25 Parameters

A> Check Digit Transmission

<Do Not Calculate
Check Digit>



Calculate Check Digit
& Transmit



Calculate Check
Digit & Not Transmit



B> Setup Code length

To set the fixed length:

1. Scan the “Begin” label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the “Complete” label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



%4Q1+

Fix Length (2 Sets Available)

1. 1st Set Begin



%4Q00

2. Decimal Value (Appendix A)

3. 1st Set Complete



%4Q01

1. 2st Set Begin



%4Q00

2. Decimal Value (Appendix A)

2. 2nt Set Complete



%4Q02

Minimum Length

1. Begin



%2+- /

2. Decimal Value (Appendix A)

3. Complete



%2CC+

5.14 Telepen Parameters

A> Type of Code

<Full ASCII Mode>



Compressed Numeric
Mode



B> Check Digit Transmission

Do Not Calculate
Check Digit



Calculate Check
Digit & Transmit



<Calculate Check Digit
& Not Transmit>



C> Set Up Code Length

To set the fixed length:

1. Scan the "Begin" label of the desired set.
2. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the length to be read.
3. Scan the "Complete" label of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



%4T1+

Fix Length (2 Sets Available)

1. 1st Set Begin



%4T00

2. Decimal Value
(Appendix A)

3. 1st Set Complete



%4T01

1. 2nd Set Begin



%4T00

2. Decimal Value
(Appendix A)

3. 2nd Set Complete



%4T02

Minimum Length

1. Begin



%2%+/-

2. Decimal Value
(Appendix A)

3. Complete



%2CF+

5.15 GS1 Databar

A> GS1 DataBar Omnidirectional

<Transmit Check Digit>



%0UN7

Don't Transmit
Check Digit



%0UN5

**<Transmit
Application ID>**



%0U88

Don't Transmit
Application ID



%0U80

Transmit Symbology ID



%0U44

**<Don't Transmit
Symbology ID>**



%0U40

B> GS1 DataBar Limited Parameters

<Transmit Check Digit>



%0VN7

Don't Transmit
Check Digit



%0VN5

<Transmit Application ID>



%0V88

Don't Transmit
Application ID



%0V80

Transmit Symbology ID



%0V44

<Don't Transmit
Symbology ID>



%0V40

C> GS1 DataBar Expanded Parameters

Transmit Symbology ID



%0W44

<Don't Transmit
Symbology ID>



%0W40

Ch.6 Miscellaneous Parameters

6.1 Language Selection

<US English>



%0ZV0

UK English



%0ZV1

Italian



%0ZV2

Spanish



%0ZV3

French



%0ZV4

German



%0ZV5

Swedish



%0ZV6

Switzerland



%0ZV7

Hungarian



%0ZV8

Japanese



%0ZV9

Belgium



%0ZVA

Portuguese



%0ZVB

Denmark



%0ZVC

Netherlands



%0ZVD

Turkey



%0ZVE

Reserved2



%0ZVF

6.2 Bar Code ID

ON



<OFF>



Default



With this function ON, a leading character will be added to the output string while scanning code, user may refer to the following table to know what kind of bar code is being scanned.

Please refer to the table below for matching code ID of codes read in.

Code Type	ID	Code Type	ID
UPC-A	A	UPC-E	B
EAN-8	C	EAN-13	D
CODE 39	E	CODE 128	F
Interleave 25	G	Industrial 25	H
Matrix 25	I	Codabar/NW7	J
CODE 93	K	CODE 11	L
China Postage	M	MSI/PLESSEY	N
Code 2 of 6	P	LCD25	Q
Telepen	T	GS1 DataBar	U
GS1 DataBar Limited	V	Omnidirectional GS1 DataBar Expanded	W

User Define Code ID

To set the code ID:

1. Scan the symbologies label.
2. Go to the ASCII Tables in Appendix B, scan label that represents the desired code ID.

Note:

User define code ID will override default value.

Program will not check the conflict. It is possible to have more than two symbologies which have same code ID.

UPC-A



%01A+

UPC-E



%01B+

EAN-13/JAN-13



%91Y+

EAN-8/JAN-8



%01Z+

CODE 39



%01E+

CODE 128



%01F+

CODABAR/NW7



%01J+

Interleave 25



%91G+

Industrial 25



%91H+

Matrix 25



%91I+

CODE 93



%91K+

CODE 11



%91L+

ChinaPostage



%91M+

MSI/PLESSEY



%91N+

Code 2 of 6



Telepen



LCD25



GS1 DataBar
Omnidirectional ON



GS1 DataBar
Limited ON



GS1 DataBar
Expanded ON



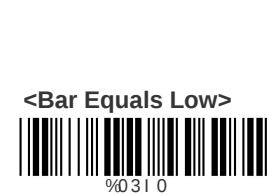
Reserved5



Reserved6



6.3 Reading Level



6.4 Accuracy



6.5 Buzzer Beep Tone



6.6 Sensitivity of Continuous Reading Mode

A> Quick Setting:
<Fast>



Slow



B> Same Code Delay Reading Interval

Following code sequences represent the length of time before a barcode can be rescanned at continuous and flash reading mode. The value can be defined from 1-50 and they represent 100ms to 5 seconds in 100ms interval. Default value is 3 (0.3 seconds).

To setup same code delay reading interval:

- 1. Scan the "Begin" label
- 2. Go the Decimal Value Tables in Appendix A, Scan label(s), that represents the same code delay reading interval. They are ranged from 1-50. One step is represented 0.1 second. So the interval is from 0.1 to 5 seconds.
- 3. Scan the "Complete" label

Repeat the steps 1-3 to set time out of same symbol

1.Begin



2.Decimal Value
(1-50) (Appendix A)

3.Complete



6.7 Reverse Output Characters

<Disable>



%03H0

Enable



%03H1

6.8 Setup Deletion

To setup the deletion of output characters:

1. Scan the label of the desired set below.
2. Scan the label of the desired symbology.
3. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the desired position to be deleted.
4. Scan the "Complete" label of "Character Position to be Deleted".
5. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the number of characters to be deleted.
6. Scan the "Complete" label of "Number of Characters to be Deleted".

Repeat the steps 1 – 6 to set additional deletion.

A> Select Deletion Set Number

1. 1st Set



%800+

2. 2nd Set



%801+

3. 3rd Set



%802+

4. 4th Set



%803+

5. 5th Set



%804+

6. 6th Set



%805+

B> Symbolologies Selection

UPC-A



%81A+

UPC-E



%81B+

EAN-13/JAN-13/ISBN-13



%81Y+

EAN-8/JAN-8



%81Z+

CODE 39



%81E+

CODE 128



%81F+

CODABAR/N97



%81J+

Interleave 25



%81G+

Industrial 25



%81H+

Matrix 25



%81I+

CODE 93



%81K+

CODE 11



%81L+

China Postage



%81M+

MSI/PLESSEY



%81N+

Code 2 of 6



% 81P+

Telepen



%81T+

LCD25



%81Q+

GS1 DataBar
Omnidirectional



%81U+

GS1 DataBar
Limited



%81V+

GS1 DataBar
Expanded



% 81W+

All Codes



%81S+

None



% 814+

C> Character Position to be Deleted

1. Decimal Value
(Appendix A)

2. Complete



%8 20+

D> Number of Characters to be Deleted

1. Decimal Value
(Appendix A)

2. Complete



%8 30+

6.9 Setup Insertion

To setup the insertion of output characters

1. Scan the label of the desired set.
2. Scan the label of the desired symbology.
3. Go to the Decimal Value Tables in Appendix A, scan label(s) that represents the desired position to be inserted.
4. Scan the “Complete” label of “Character Position to be Inserted”.
5. Go to the ASCII Tables in Appendix B or Function Key Tables in Appendix C, scan label(s) that represents the desired characters to be inserted.
6. Scan the “Complete” label of “Characters to be inserted”.

Repeat the steps 1 - 6 to set additional insertion.

A> Select Insertion Set Number

1. 1st Set



2. 2nd Set



3. 3rd Set



4. 4th Set



5. 5th Set



6. 6th Set



B> Symbolologies Selection

UPC-A



%51A+

UPC-E



%51B+

EAN-13/JAN-13/ISBN-13



%51Y+

EAN-8/JAN-8



%51Z+

CODE 39



%51E+

CODE 128



%51F+

CODABAR/NW7



%51J+

Interleave 25



%51G+

Industrial 25



%51H+

Matrix 25



%51I+

CODE 93



%51K+

CODE 11



%51L+

China Postage



%51M+

MSI/PLESSEY



%51N+

Telepen



%51T+

Code 2 of 6



%51P+

GS1 DataBar
Omnidirectional



%51U+

LCD255



%51Q+

GS1 DataBar
Expanded



%51W+

GS1 DataBar
Limited



%51V+

None



%514+

All Codes



%51S+

C> Character Position to be Inserted

1. Decimal Value
(Appendix A)

2. Complete



%520+

D> Characters to be Inserted

1. ASCII Table
(Appendix B)

2. Complete



%530+

6.10 Scanning Line Selection for Multi Parallel lines modes

<Double Click to Interchange
Multi Parallel / Single line>



Multiple Parallel Lines Only



Single Line Only



Ch7. Bluetooth Configuration

BT Parameter Set Default



7.1 Scanner Mode

A>Setup SPP Master Mode

<SPP Master Mode>



Please follow the steps to setup the communication between the scanner and cradle.

- 1) The scanner must scan “SPP Master Mode” barcode to set the scanner in master mode.
- 2) Scan the Bluetooth MAC address code located on the bottom of the cradle.
- 3) When the Bluetooth MAC address code was successfully scanned, scanner will sound 3 short beeps with green LED flash once.
- 4) Wait approximately five seconds for completing the connection process with up-tone.
- 5) If successful, blue LED of scanner will slow flash and the cradle will be continued on.

B>Setup SPP Slave Mode

SPP Slave Mode



Please follow the below steps to setup the communication between the scanner and Bluetooth application device.

- 1) The scanner must scan “SPP Slave Mode” barcode, to set the scanner in slave mode.
- 2) When control the Bluetooth device to search the scanner, enter pin code (default 00:00:00) to setup comport.
- 3) When scanner is successful connected, the scanner blue LED will also blink with up-tone. Blue LED will slowly flash to finish the setup.

C>Setup HID Slave Mode



HID Slave Mode

To setup the communication between the scanner and Bluetooth HID profile application device, follow the steps.

- 1) The scanner must scan “HID Slave Mode” barcode to set the scanner in HID slave mode.
- 2) When control the Bluetooth device to search the scanner, enter pin code to setup pairing. You can scan number barcode on Appendix D, “Decimal Value Table II” number 0~9, to setup.
- 3) When scanner is successful connected, scanner blue LED will also blink with up-tone. Blue LED will slowly flash to finish the setup.

7.2 Out of Range

When “Out of Range” function is enabled, and the scanner is working at out of transmission range, the scanned data will be stored to out-of-range memory. Memory size is approximately 25,000 sets of EAN13 barcode type. The all stored data will be transmitted to device when the link is reconnected, and the all data stored in out-of-range memory will be cleared.

<Out of Range Enable>



Out of Range Disable



7.3 Sleep Mode

The scanner is equipped with sleep mode function to save battery energy when the scanner is not used for 1 minute or 10 minutes. During sleep mode, all the functions and connection will be halted until pressing the trigger button. The communication with cradle or Bluetooth device will be reconnected.

Sleep Mode 1 min. ON



Sleep Mode 10 min. ON



<Sleep Mode OFF>



7.4 Batch Mode

“***” means “Quick Setting Label”. The function can be executed directly by scanning barcode instead of doing the general programming process.

Batch Mode On



< Batch Mode Off>



*** Batch Data Read



*** Batch Data Clear



***Delete Last Data



7.5 Firmware Version

Display the firmware version of the scanner, please scan below barcode.

Scanner Firmware Version



Cradle Firmware Version



Scanner MAC Address



Cradle MAC Address



Appendix A Decimal Value Table



Appendix B ASCII Table

NULL  00	STX  02	SOH  01
ETX  03	ENQ  05	EOT  04
ACK  06	BS  08	BEL  07
HT  09	VT  0B	LF  0A
FF  0C	SO  0E	CR  0D
SI  0F	DC1  11	DLE  10
DC2  12	DC4  14	DC3  13
NAK  15	ETB  17	SYN  16
CAN  18	SUB  1A	EM  19
ESC  1B	GS  1D	FS  1C
RS  1E		US  1F

SPACE



20

#



23

&



26

)



29

,



2C

/



2F

2



32

5



35

8



38

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3B

>



3E

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22

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25

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28

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2B

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2E

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31

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34

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37

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3A

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3D

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21

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24

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27

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2A

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2D

0



30

3



33

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36

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39

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3C

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3F

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40

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43

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46

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49

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4C

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4F

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52

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55

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58

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5B

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5E

B



42

E



45

H



48

K



4B

N



4E

Q



51

T



54

W



57

Z



5A

]



5D

A



41

D



44

G



47

J



4A

M



4D

P



50

S



53

V



56

Y



59

\



5C

_



5F

、  60	b  62	a  61
c  63	e  65	d  64
f  66	h  68	g  67
i  69	k  6B	j  6A
l  6C	n  6E	m  6D
o  6F	q  71	p  7C
r  72	t  74	s  73
u  75	w  77	v  76
x  78	z  7A	y  79
{  7B	}  7D	  7C
~  7E		DEL  7F

Appendix C Function Key Table

F1  C0	F2  C1
F3  C2	F4  C3
F5  C4	F6  C5
F7  C6	F8  C7
F9  C8	F10  C9
F11  CA	F12  CB
Insert  CC	Delete  CD
Home  CE	Page Up  CF
Page Down  D0	End  D1
Left  D2	Right  D3
Up  D4	Down  D5

Appendix D Decimal Value Table II

0		1	
2		3	
4		5	
6		7	
8		9	
Enter			

All above programming are subject to change without notice.

Save Parameters



Recall Stored
Parameters



Set All Defaults



Start Configuration



End Configuration



Abort Configuration



Version Information



Ver3.9
0145-85E0011

