

B A R C O D E
S C A N N E R

**operation
manual**



Table of Contents

Introduction	3
Installation	4
Pin Assignments	5
Method of Programming	7
Interface selection	10
Reading Mode	11
RS - 232 Communication Parameters	12
Keyboard Wedge Parameters	14
Output Characters Parameters	16
Wand Emulation	18
OCIA Mode Parameters	19
Bar Code Type Selection	20
UPC/EAN/JAN	24
Code 39	26
Code 128	28
Interleave 25	30
Industrial 25	32
Code 2 of 6	34
Matrix 25	36
CODABAR/NW7	38
Code 93	40
Code 11	42
MSI/PLESSEY	44
BC 412	46
Language Selection	48
Bar Code ID	50

Table of Contents

Accuracy	53
Sensitivity of Continuous Reading Mode	53
Buzzer Beep Tone	54
PnP/Notebooks	54
Reverse Output Characters	54
Setup Deletion	55
Setup Insertion	59
Setup IR Sensor	63
AppendixA	64
AppendixB	65
AppendixC	69

Introduction

Thank you for selecting Birch barcode reader. The reader is equipped with up to date optical technology. It auto-discriminates nearly twenty different kinds of barcode symbologies. Birch also provides other barcode related products to meet your application.

The easily plug and play design of the keyboard wedge interface, provides a flexible solution to your application to explore the magic of the barcode system.

This manual provides an easily method to modify the decoding options and interface protocols of the scanner by scanning the barcode in the manual. Before starting, please make sure that the barcode reader is properly powered. For PC keyboard emulation type interface, power is directly come from the system. For RS-232 or other non-PC keyboard emulation type interface, an external power is always needed.

Codes Read

ALL UPC/EAN/JAN, Code 39, Code 39 Full ASCII, Code 128, Interleave25, Industrial 25, Matrix25, CODABAR/NW7, Code 11, BC412, MSI/PLESSEY, Code 93, China Postage, Code 32/Italian Pharmacy others available upon request.



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 health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse 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 supplier and check the terms and conditions of the purchase

Installing the Keyboard Wedge Reader

To install a keyboard wedge reader, follow the steps below:

1. Turn off the power of the PC or Terminal.
2. Unplug keyboard from the PC or Terminal.
3. Make sure you have the Y Cable with appropriate connector type for your PC or Terminal.
4. Connect Scanner to your PC or Terminal.
5. Connect the keyboard connector to the female connector of the Y cable.
6. Turn on the power of PC or Terminal.

If the installation is successful , the Green LED light on the top of the reader should light up, and you should hear three beeps from reader.

Installing the RS232 Reader

To install a RS232 reader, follow the steps below :

1. Turn off the power of the PC or Terminal.
2. Make sure the connector type from RS232 to the PC or Terminal is correct.
3. Plug AC Adaptor connector into connector of the reader.
4. Turn on the power of PC or Terminal.
5. Setup the Interface of the reader to RS232 mode by scanning the barcode in the Interface Selection section.

If the installation is successful, the Green LED light on the top of the reader should light up, and you should hear three beeps from reader.

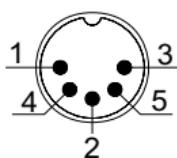
Pin Assignments

1. Keyboard Output

DIN 5 MALE

Pin No. Function

1	HOST CLK
2	HOST DATA
4	GND
5	Vcc(+5V)

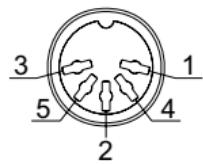


DIN 5 Male
Pin Assignment

DIN 5 FEMALE

Pin No. Function

1	KB CLK
2	KB DATA
4	GND
5	Vcc(+5V)

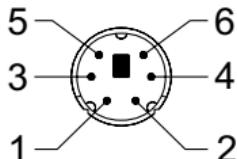


DIN 5 Female
Pin Assignment

MiniDIN 6 MALE

Pin No. Function

1	HOST DATA
3	GND
4	Vcc
5	HOST CLK

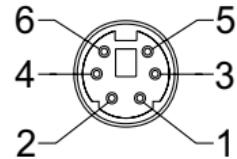


MiniDIN 6 Male
Pin Assignment

MiniDIN 6 FEMALE

Pin No. Function

1	KB DATA
3	GND
4	Vcc
5	KB CLK

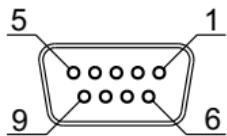


MiniDIN 6 Female
Pin Assignment

Pin Assignments

2. RS-232 Output DB 9 Female

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



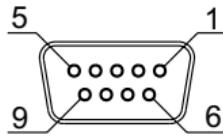
+5V + - GND

DB 9 Female Pin Assignment

Male DC Jack

3. WAND Emulation Output DB 9 Female

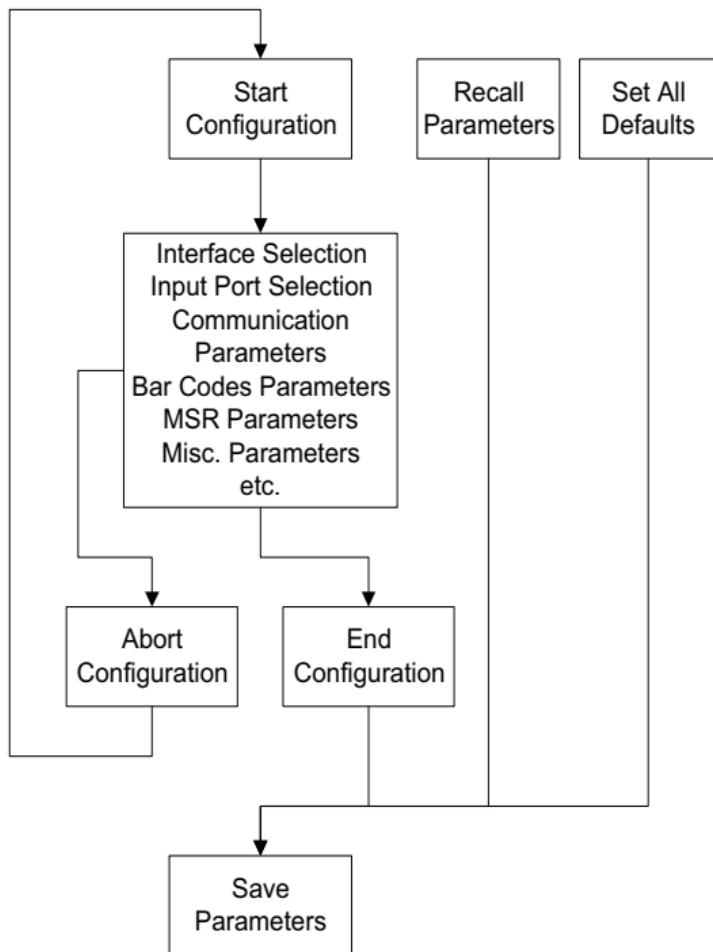
Pin No.	Function
2	DATA
7	GND
9	Vcc (+5V)



DB 9 Female Pin Assignment

Method of Programming

Setup Flow Chart



Loop of Programming

The philosophy of programming parameters has been shown on the flow chart. 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.

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" on page 9, 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.

Setup Commands

Save Parameters

Save the parameter settings
permanently.



%%\$+/0

Recall Stored Parameters

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



%%\$+/1

Set All Defaults

Set all the parameters to
the factory default settings.



%%\$+/2

Start Configuration



%%\$+/3

End Configuration



%%\$+/4

Abort Configuration

Terminate current
programming status.



%%\$+/6

Version Information

Display the decoder version
information and date code.



%%\$+/5



Start Configuration

Interface

Interface Selection



%0 0 U0

<Keyboard>



%0 0 U8

RS232 Mode



%0 0 M2

WAND Emulation



%0 X08

USB Mode



%0 0 M4

OCIA Mode

Reading Mode



End Configuration

Reading Mode

<Good Read OFF>



%0271

Trigger ON/OFF



%0270

Continuous/Trigger OFF



%0272

Continuous/Auto Power ON



%0273

Flash



%0274

Flash/Auto Power ON



%0276

Testing



%0275

Reserved1



%0277



Save Configuration



RS-232 Communication

Start Configuration

RS-232 Communication Parameters

Set Up BAUD Rate



600

%0 Y70



1200

%0 Y71



2400

%0 Y72



4800

%0 Y73



<9600>

%0 Y77



19200

%0 Y74



38400

%0 Y75

Set Up Data Bits



7 Data Bits

%0 Y80



<8 Data Bits>

%0 Y88

Set Up Stop Bits



<1 Bit>

%0 Y08



2 Bits

%0 Y00

RS-232 Communication



End Configuration

RS-232 Communication Parameters

Set Up Parity

<None>



%0 YN7

Even



%0 YN2

Odd



%0 YN3

Mark



%0 YN1

Space



%0 YN0

Handshaking

RTS/CTS Enable



%0 188

<RTS/CTS Disable>



%0 180

ACK/NAK Enable



%0 144

<ACK/NAK Disable>



%0 140

XON/XOFF Enable



%0 3K4

<XON/XOFF Disable>



%0 3K0



Save Configuration



Keyboard Wedge

Start Configuration

Keyboard Wedge Parameters

Terminal Type



%0ZF0

<IBM PC/AT, PS/2>



%0ZF1

IBM PC/XT



%0ZF2

IBM PS/2 25, 30



%0ZF3

NEC 9800



%0ZF4

ADB



%0ZF5

IBM 5550



%0ZF6

IBM 122 Key (1)



%0ZF7

IBM 102 Key



%0ZF8

IBM 122 Key (2)



%0ZF9

Reserved 1



%0ZFA

Reserved 2



%0ZFB

Reserved 3



%0ZFC

Reserved 4



%0ZFD

Reserved 5

Keyboard Wedge



End Configuration

Keyboard Wedge Parameters

Upper/Lower Case

<No Change>



%0330

Upper Case



%0331

Lower Case



%0332

Send Character by ALT Method

Enable



%0308

<Disable>



%0300

Select Numerical Pad

ON



%01K4

<OFF>



%01K0



Save Configuration



Output Parameters

Start Configuration

Output Characters Parameters

Select Terminator



%7 S2 +

<CR+LF>



%7 S7 +

None



%7 S0 +

CR



%7 S1 +

LF



%7 S4 +

Space



%7 S3 +

HT(TAB)



%7 S5 +

STX-ETX

Output Parameters



End Configuration

Output Characters Parameters

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



Save Configuration



Start Configuration

Wand Emulation

TTL Level Representation



%02K4

<Bar Equals High>



%02K0

Bar Equals Low

Scan Speed Selection



%0288

<Fast>



%0280

Slow

Output Format Selection



%0208

<Output as Code 39>



%0200

Output as Code 39
Full ASCII



%0XK4

Output as Original
Code Format

OCIA Mode



End Configuration

OCIA Mode Parameters

OCIA Mode Parameters

<NCR 8 Bit Format>



NCR 9 Bit Fomat



Spectra-Physics



Nixdorf



Save Configuration



Symbology

Start Configuration

Bar Code Type Selection

UPC-A



<ON>

%0A44



OFF

%0A40

UPC-E



<ON>

%0B08



OFF

%0B00

EAN-13/JAN-13



<ON>

%0A22



OFF

%0A20

EAN-8/JAN-8



<ON>

%0A11



OFF

%0A10

CODE 39



<ON>

%0E08



OFF

%0E00

Symbology



End Configuration

Bar Code Type Selection

CODE 128

<ON>



%0 F08

OFF



%0 F00

CODABAR/NW7

<ON>



%0 J08

OFF



%0 J00

Interleave 25

<ON>



%0 G08

OFF



%0 G00

Industrial 25

ON



%0 H08

<OFF>



%0 H00

Code 2 of 6

ON



%0 P08

<OFF>



%0 P00



Save Configuration



Symbology

Start Configuration

Bar Code Type Selection

Matrix 25



%0108

ON



%0100

<OFF>

CODE 93



%0K08

ON



%0K00

<OFF>

CODE 11



%0L08

ON



%0L00

<OFF>

China Postage



%0M08

ON



%0M00

<OFF>

MSI/PLESSEY



%0N08

ON



%0N00

<OFF>

Symbology



End Configuration

Bar Code Type Selection

BC412

ON



%0 008

<OFF>



%0 000

Reserved4

ON



%0 Q08

<OFF>



%0 Q00

Reserved5

ON



%0 R08

<OFF>



%0 R00

Reserved6

ON



%0 S08

<OFF>



%0 S00

Select All Bar Codes



%1 A/ +



Save Configuration



Symbology

Start Configuration

UPC/EAN/JAN

Reading Type



%0AK4

UPCA=EAN13 ON



%0AK0

UPCA=EAN13<OFF>



%0B88

ISBN Enable



%0B80

ISBN <Disable>



%0B44

ISSN Enable



%0B40

ISSN <Disable>



%0100

Decode with
Supplements



%0108

<Autodiscriminate
Supplements>

Supplements Set Up



%0B33

<Not Transmit>



%0B31

Transmit 2 Code



%0B32

Transmit 5 Code



%0B30

Transmit 2&5 Code

Symbology



End Configuration

UPC/EAN/JAN

Check Digit Transmission

UPC-A Check Digit
Transmission <ON>



%0 AI 2

OFF



%0 AI 0

UPC-E Check Digit
Transmission <ON>



%0 BI 2

OFF



%0 BI 0

EAN-8 Check Digit
Transmission <ON>



%0 A88

OFF



%0 A80

EAN-13 Check Digit
Transmission <ON>



%0 AH1

OFF



%0 AH0

ISSN Check Digit
Transmission <ON>



%0 BK4

OFF



%0 BK0



Save Configuration



Symbology

Start Configuration

Code 39

Type of Code



%0 EH1

<Standard>



%0 EH0

Full ASCII



%0 E80

Italian Pharmacy/Code
32<OFF>



%0 E88

Italian Pharmacy/
Code 32 ON

Check Digit Transmission



%0 EM2

<Do Not Calculate
Check Digit>



%0 EM6

Calculate Check Digit
&Transmit



%0 EM4

Calculate Check Digit
& Not Transmit

Output Start/Stop Character



%0 E44

Enable



%0 E40

<Disable>

Decode Asterisk



%0 E22

Enable



%0 E20

<Disable>

Symbology



End Configuration

Code 39

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 E1+

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 E00

1st Set Complete



%4 E01

2nd Set Begin
(Then scan value in
Appendix A)



%4 E00

2nd Set Complete



%4 E02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 C0 +



Save Configuration



Symbology

Start Configuration

Code 128

Check Digit Transmission



%0 FN1

Do Not Calculate
Check Digit



%0 FN7

Calculate Check
Digit & Transmit



%0 FN5

<Calculate Check
Digit & Not Transmit>

Append FNC2



%0 F88

ON



%0 F80

<OFF>

Symbology



End Configuration

Code 128

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 F1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 F00

1st Set Complete



%4 F01

2nd Set Begin
(Then scan value in
Appendix A)



%4 F00

2nd Set Complete



%4 F02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 C1 +



Save Configuration



Symbology

Start Configuration

Interleave 25

Check Digit Transmission



%0 GN3

<Do Not Calculate
Check Digit>



%0 GN7

Calculate Check
Digit & Transmit



%0 GN5

Calculate Check
Digit & Not Transmit

Set Up Number of Character



%0 G8 8

<Even>



%0 G8 0

Odd

Brazilian Banking Code



%0 G4 0

<Disable>



%0 G4 4

Enable

Symbology



End Configuration

Interleave 25

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 G1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 G0 0

1st Set Complete



%4 G0 1

2nd Set Begin
(Then scan value in
Appendix A)



%4 G0 0

2nd Set Complete



%4 G0 2

Minimum Length

Begin(Then scan value
in Appendix A)



%2 + - /

Complete



%2 C2 +

Save Configuration



Start Configuration

Symbology

Industrial 25

Check Digit Transmission



%0 HN3

<Do Not Calculate
Check Digit>



%0 HN7

Calculate Check
Digit & Transmit



%0 HN5

Calculate Check
Digit & Not Transmit

Symbology



End Configuration

Industrial 25

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 H1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 H00

1st Set Complete



%4 H01

2nd Set Begin
(Then scan value in
Appendix A)



%4 H00

2nd Set Complete



%4 H02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 C3 +



Save Configuration



Start Configuration

Code 2 of 6

Check Digit Transmission



%0 PN3

Do Not Calculate
Check Digit



%0 PN7

<Calculate Check
Digit & Transmit>



%0 PN5

Calculate Check Digit
& Not Transmit



End Configuration

Code 2 of 6

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 P1+

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 P00

1st Set Complete



%4 P01

2nd Set Begin
(Then scan value in
Appendix A)



%4 P00

2nd Set Complete



%4 P02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 CB+

Save Configuration



Symbology

Start Configuration

Matrix 25

Check Digit Transmission



<Do Not Calculate
Check Digit>



Calculate Check
Digit & Transmit



Calculate Check
Digit & Not Transmit

Symbology



End Configuration

Matrix 25

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>



%41 1+

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%41 00

1st Set Complete



%41 01

2nd Set Begin
(Then scan value in
Appendix A)



%41 00

2nd Set Complete



%41 02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 + - /

Complete



%2 C4 +



Save Configuration



Symbology

Start Configuration

CODABAR/NW7

Set Up Start/Stop Characters Upon Transmission



%0 J H1

ON



%0 J H0

<OFF>

Transmission Type of Start/Stop



%04 VF

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



%04 FF

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



%04 V1

A Start



%04 F1

A Stop



%04 V2

B Start



%04 F2

B Stop



%04 V4

C Start



%04 F4

C Stop



%04 V8

D Start



%04 F8

D Stop

Symbology



End Configuration

CODABAR/NW7

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 J 1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 J 0 0

1st Set Complete



%4 J 0 1

2nd Set Begin
(Then scan value in
Appendix A)



%4 J 0 0

2nd Set Complete



%4 J 0 2

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 C5 +

Save Configuration



Symbology

Start Configuration

Code 93

Check Digit Transmission



%0 KN4

<Calculate Check 2
Digits & Not Transmit>



%0 KN3

Do Not Calculate
Check Digit

Symbology



End Configuration

Code 93

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 K1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 K00

1st Set Complete



%4 K01

2nd Set Begin
(Then scan value in
Appendix A)



%4 K00

2nd Set Complete



%4 K02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 + - /

Complete



%2 C6 +



Save Configuration



Symbology

Start Configuration

Code 11

Check Digit Transmission



%0LN3

<Do Not Calculate
Check Digit>



%0LN7

Calculate Check 1
Digit & Transmit



%0LN5

Calculate Check 1 Digit
& Not Transmit



%0LN6

Calculate Check 2
Digits & Transmit



%0LN4

Calculate Check 2
Digits & Not Transmit

Symbology



End Configuration

Code 11

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 L 1 +

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 L 00

1st Set Complete



%4 L 01

2nd Set Begin
(Then scan value in
Appendix A)



%4 L 00

2nd Set Complete



%4 L 02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 + - /

Complete



%2 C7 +



Save Configuration



Symbology

Start Configuration

MSI/PLESSEY

Check Digit Transmission



%0 NN3

<Do Not Calculate
Check Digit>



%0 NN7

Calculate Check
Digit & Transmit



%0 NN5

Calculate Check
Digit & Not Transmit

Symbology



End Configuration

MSI/PLESSEY

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)

1st Set Begin
(Then scan value in
Appendix A)



%4 N00

1st Set Complete



%4 N01

2nd Set Begin
(Then scan value in
Appendix A)



%4 N00

2nd Set Complete



%4 N02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 + - /

Complete



%2 C9 +



Save Configuration



Symbology

Start Configuration

BC 412

Check Digit Transmission



Do Not Calculate
Check Digit



<Calculate Check
Digit & Transmit>



Calculate Check
Digit & Not Transmit

Symbology



End Configuration

BC 412

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 O1+

Fix Length (2 Sets Available)

1st Set Begin
(Then scan value in
Appendix A)



%4 O00

1st Set Complete



%4 O01

2nd Set Begin
(Then scan value in
Appendix A)



%4 O00

2nd Set Complete



%4 O02

Minimum Length

Begin(Then scan value
in Appendix A)



%2 +- /

Complete



%2 CA+



Save Configuration



Start Configuration

Operation

Language Selection



%0ZV0

<US English>



%0ZV1

UK English



%0ZV2

Italian



%0ZV3

Spanish



%0ZV4

French



%0ZV5

German



%0ZV6

Swedish



%0ZV7

Switzerland



%0ZV8

Hungarian



%0ZV9

Japanese

Operation



End Configuration

Language Selection

Belgium



%0ZVA

Portuguese



%0ZVB

Denmark



%0ZVC

Netherlands



%0ZVD

Turkey



%0ZVE

Reserved1



%0ZVF



Save Configuration



Operation

Start Configuration

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
BC412	O		

User Define Code ID

To set the code ID:

1. Scan the symbologies lable.
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.

Operation



End Configuration

Bar Code ID

UPC-A



%9 1 A+

UPC-E



%9 1 B+

EAN-13/JAN-13



%9 1 Y+

EAN-8/JAN-8



%9 1 Z+

CODE 39



%9 1 E+

CODE 128



%9 1 F+

CODABAR/NW7



%9 1 J+

Interleave 25



%9 1 G+

Industrial 25



%9 1 H+

Code 2 of 6



%9 1 P+

Matrix 25



%9 1 I+



Save Configuration



Operation

Start Configuration

Bar Code ID



%01K+

CODE 93



%01L+

CODE 11



%01M+

China Postage



%01N+

MSI/PLESSEY



%01O+

BC412



%01Q+

Reserved4



%01R+

Reserved5



%01S+

Reserved6

Reading Level



%0312

Bar Equals High



%0310

<Bar Equals Low>

Operation



End Configuration

Misc. Parameters

Accuracy

<1 Time>



2 Times



3 Times



4 Times



Sensitivity of Continuous Reading Mode

<Fast>



Slow



Save Configuration



Operation

Start Configuration

Misc. Parameters

Buzzer Beep Tone



<High>

%01J3



Medium

%01J2



Low

%01J1



Off

%01J0

PnP/Notebooks



<Disable>

%0340



Enable

%0344

Reverse Output Characters



<Disable>

%03H0



Enable

%03H1

**Setup Deletion****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.

Select Deletion Set Number

1. 1st Set



2. 2nd Set



3. 3rd Set



4. 4th Set



5. 5th Set



6. 6th Set



Save Configuration



Operation

Start Configuration

Setup Deletion

Symbologies Selection



%8 1 A+

UPC-A



%8 1 B+

UPC-E



%8 1 Y+

EAN-13/JAN-13



%8 1 Z+

EAN-8/JAN-8



%8 1 E+

CODE 39



%8 1 F+

CODE 128



%8 1 J+

CODABAR/NW7



%8 1 G+

Interleave 25



%8 1 H+

Industrial 25



%8 1 I +

Matrix 25



%8 1 K+

CODE 93



%8 1 L +

CODE 11

Operation



End Configuration

Setup Deletion

China Postage



MSI/PLESSEY



BC412



Code 2 of 6



Resvered4



Resvered5



All Codes



None



Save Configuration



Operation

Start Configuration

Setup Deletion

Character Position to be Deleted

1. Scan Decimal Value
in Appendix A first.



%820+

2. Complete

Number of Characters to be Deleted

1. Scan Decimal Value
in Appendix A first.



%830+

2. Complete

**Setup Insertion****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.

Select Insertion Set Number

1st Set



%500+

2nd Set



%501+

3rd Set



%502+

4th Set



%503+

5th Set



%504+

6th Set



%505+



Save Configuration



Operation

Start Configuration

Setup Intertion

Symbologies Selection



%5 1 A+

UPC-A



%5 1 B+

UPC-E



%5 1 Y+

EAN-13/JAN-13



%5 1 Z+

EAN-8/JAN-8



%5 1 E+

CODE 39



%5 1 F+

CODE 128



%5 1 J +

CODABAR/NW7



%5 1 G+

Interleave 25



%5 1 H+

Industrial 25



%5 1 I +

Matrix 25



%5 1 K+

CODE 93



%5 1 L+

CODE 11

Operation



End Configuration

Setup Insertion

China Postage



%5 1 M+

MSI/PLESSEY



%5 1 N+

BC412



%5 1 O+

Code 2 of 6



%5 1 P+

Resvered4



%5 1 Q+

Resvered5



%5 1 R+

All Codes



%5 1 S+

None



%5 1 4+

Save Configuration





Start Configuration

Operation

Setup Insertion

Character Position to be Inserted

1. Scan Decimal Value
in Appendix A first.



%520+

2. Complete

Characters to be Inserted

1. Scan ASCII Table
in Appendix B first.



%530+

2. Complete

Operation



End Configuration

Setup IR Sensor

Setup IR Sensor

<Disable>



%0 XH0

Enable



%0 XH1



Save Configuration

Appendix A

Decimal Value



Appendix B

ASCII Tables

NULL



ETX



ACK



HT



FF



SI



DC2



NAK



CAN



ESC



RS



STX



ENQ



BS



VT



SO



DC1



DC4



ETB



SUB



GS



SOH



EOT



BEL



LF



CR



DLE



DC3



SYN



EM



FS



US



ASCII Tables

SPACE



20

!



21

#



23

"



\$



24

&



26

%



25

)



29

(



27

,



2C

+



2A

/



2F

-



2D

2



32

.



2E

1



30

5



35

31



3

8



38

4



33

;



3B

34



6

>



3E

7



36

:



37

3A



<

=



3C

?



3F

Appendix B

ASCII Tables

@



40

A



41

C



43

B



42

D



44

F



46

H



48

G



47

I



49

J



4A

L



4C

K



4B

M



4D

O



4F

N



4E

P



50

R



52

T



51

S



53

U



55

V



56

X



58

W



57

Y



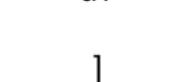
59

[



5B

]



\



^



ASCII Tables



60

b



61



63

c

62



64



66

f

65



67

i

68



68

h



69

l

6B



6A

k



6C

o

6E



6D

n



6F

q



70

r



71



73

t



72

u

74



76

v

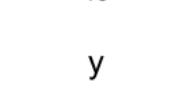


75

w



77



79

y



78

z



7A

{

}



7C

}



7B

~



7D



7F

DEL

Appendix C

Function Key Tables

F1



F2



F4



F3



F5



F7



F6



F8



F10



F9



F11



Insert



F12



Delete



Home



Page Down



End



Right



Up



Down



