
VEGA V-1010 Linear Imager Handheld Bar code Scanner



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User's Installation and Configuration

Manual

Scantech-ID VEGA

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Introduction

VEGA is a cutting-edge gun-type barcode scanner which is designed specifically for retail market. To the brand new series of **VEGA**, we add on more user-friendly functions with detachable cable that makes it more easily to be operated by the customers.

Speaking of the performance, this scanner supports middle to long range mode. For specification of **VEGA** which supports the reading depth up to 27 centimeter, scan rate is up to 700 scans / per second.

The new **VEGA** scanner has most modern design with the decorative cover display on the top of the scanner that will enhance the looks of the checkout counter in the retail market. This magnificent design allowed end-users to display their product information or any relevant commercial message in the cover display. This advanced mechanical design truly creates a win-win solution for both POS retail systems and consumers.

In short, **VEGA** is absolutely a high performance gun-type scanner, which provides the customer with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retailers using POS environment.

Quality and Durability

The **VEGA** comes with the same top quality as all other Scantech-ID products. So at a very competitive price the same quality and performance of more expensive products is available. Due to the high MTBF times of every component a long and service free operation time is secured.

Connectivity

The **VEGA** is available into interface types, RS232 interface, USB interface and also with Bluetooth technology, so there is always a solution to connect the Vega to your POS system.

Chapter 1 Product Safety

1.1 SAFETY & CAUTION

1. Please read the following safety statement carefully.
2. Please preserve this user manual for reference sometime.
3. Before cleaning the **VEGA**, the users must cut off all AC power. Do not use liquid or spray type of detergent to clean the **VEGA**. Please use dampish cotton cloth to clean the **VEGA**.
4. The outlet must set nearby the **VEGA** for connecting power easily.
5. Keep the **VEGA** dry to avoid short circuit.
6. During installation you must fix the equipment at solid table to avoid damage caused by falling.
7. Before inserting power please ensure the voltage is healthy to the equipment.
8. For safety please tie wire well and don't put anything on the wire.
9. If you don't use this equipment for long time, please cut off the power to avoid damage from surge power.
10. Don't spray any liquid on this scanner because it may cause a fire or short circuit.
11. Please do not open the equipment. For safety only the qualified serviceman can open the equipment.
12. If there are the following situations please contact with the qualified serviceman to check this equipment.
 - (a) The damage of wire or pin of power supply.
 - (b) Some Liquid infiltrate into the equipment.
 - (c) The equipment has been exposed to wet environment.
 - (d) The equipment can't work well.
 - (e) The equipment has any obvious damage, making the **VEGA** working abnormally.
13. Don't storage the **VEGA** at the temperature lower than -20°C (-4°F) or higher than +70°C (158°F) to avoid any damage.

1.2 FCC WARNING

This equipment complies with the requirements in Part 15 of FCC.

Any operation must comply with the conditions below:

- (a) The equipment will not cause any severe interference.
- (b) The equipment can avoid any interference from environment.

Warning!



Statement:

This product is classified as B class product. In environment this product may cause some interference. In this situation the user may do something to avoid interference.

Chapter 2 General Description

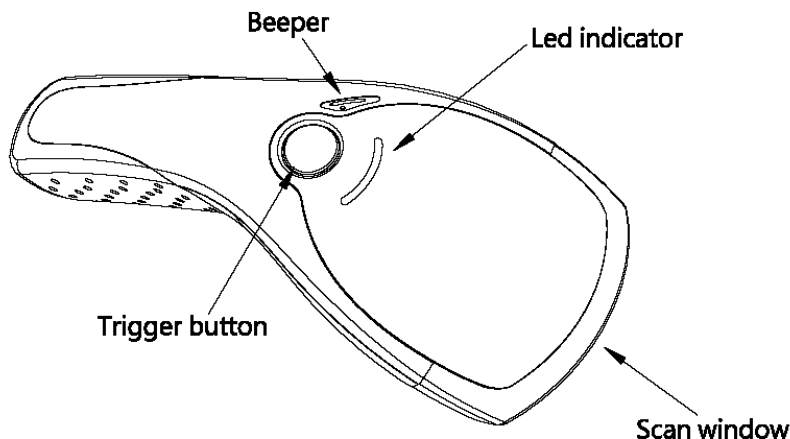
2.1 USE OF THE VEGA

THE VEGA IS VERY ERGONOMIC AND MODERN DESIGNED AND VERY USER FRIENDLY. IT CAN BE CONNECTED TO YOUR POS OR HOST SYSTEM THROUGH A RS232 CABLE, KBW CABLE, USB CABLE OR WITH BLUETOOTH WIRELESS.

To read a bar code, you simply press the red trigger button and aim the beam to the bar code. But you need to position the beam so that it falls across all bars in the 1D barcodes. You will hear one beep and the green LED indicator will light on after scan successfully.

The programming of the **VEGA** is very easy, you can set-up the **VEGA** by scan all necessary programming codes one time that meet applications, the settings are directly saved permanently, and all settings can be disabled after scan reset factory default.

THANKS TO THE POWER FULL DECODING PROCESSOR, THE VEGA CAN DECODE ALL MAJOR 1D CODES.



Chapter 3 Installation of the VEGA

3.1 V-1010 UNPACKING

Unpack the **VEGA** as follows:

1. Take the **VEGA** and its accessories out of the box.
2. Remove the packing material.
3. Check the packing list to make sure you have received all of the items ordered.

Standard Shipment Package

- a. **VEGA** Linear Imager Handheld Bar code Scanner
 - b. Communication Cable (RS-232 or Keyboard wedge or USB)
 - c. Vega Stand
 - d. User Manual
 - e. Transparent Cover Plate
4. Visually inspect the **VEGA** and accessories for any evidence of physical damage.
 5. If anything is missing or appears to be damaged, immediately contact your dealer.

ATTENTION

Store the packing material and boxes: it should be used whenever the **VEGA** is transported for servicing.

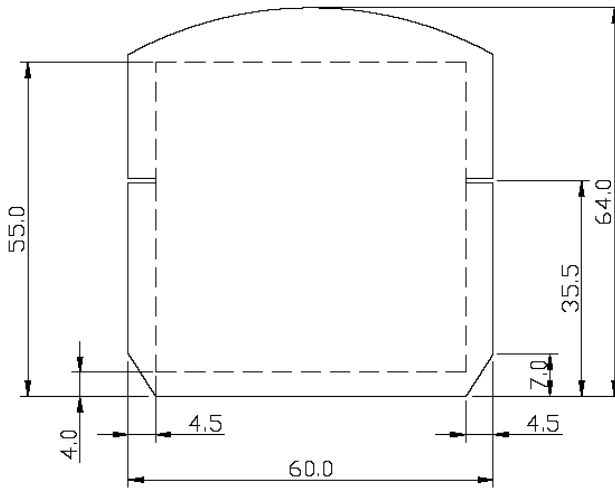
Chapter 4 Cover Display

4.1 SETUP COVER DISPLAY

The **VEGA** scanner has the opportunity to change the decorative cover display on the top of the scanner into a display that can show our own commercial message.

4.1.1 Message Format

Create your own commercial message with the following outline format, use thicker paper



4.1.2 Change Cover Display

Follow the next instruction steps to change the black Cover Display into the transparent Cover Display, so that your customers can read your own commercial message.

Step 1:
Press out the front rubber lid toward the arrow.



Step 2:
Pull out the front rubber lid off the main unit.



Step 3:
Press out top cover rim from the inner lock.



Step 4:

Press out the other side of inner lock and remove the complete cover.

**Step 5**

Assemble transparent top cover rim into inner lock.

**Step 6**

Assemble another side transparent top cover rim into the inner lock.



Step 7

Insert your commercial message card into the top cover toward the arrow.



Step 8

Assemble the front rubber lid into the main unit toward the arrow.



Chapter 5 Configuring the VEGA

5.1 PREFACE

How to configure the **VEGA**:

The Barcode programming feature gives the possibility to change the **VEGA** scanner settings with use programming labels.

5.1.1 Changing Scanner Settings with Programming Codes

You can set-up your **VEGA** by scan all necessary programming codes for parameters that meet applications.

In order to change the scanner settings please follow the sequence below:

1. Power-up the scanner.
2. Open the scanner programming mode by scanning Start Configuration.
3. Change scanner settings by scanning any of the programming code that meet applications.
4. Close the scanner programming mode by scanning End Configuration.
5. Save configuration by scanning Save Parameters

An Example:

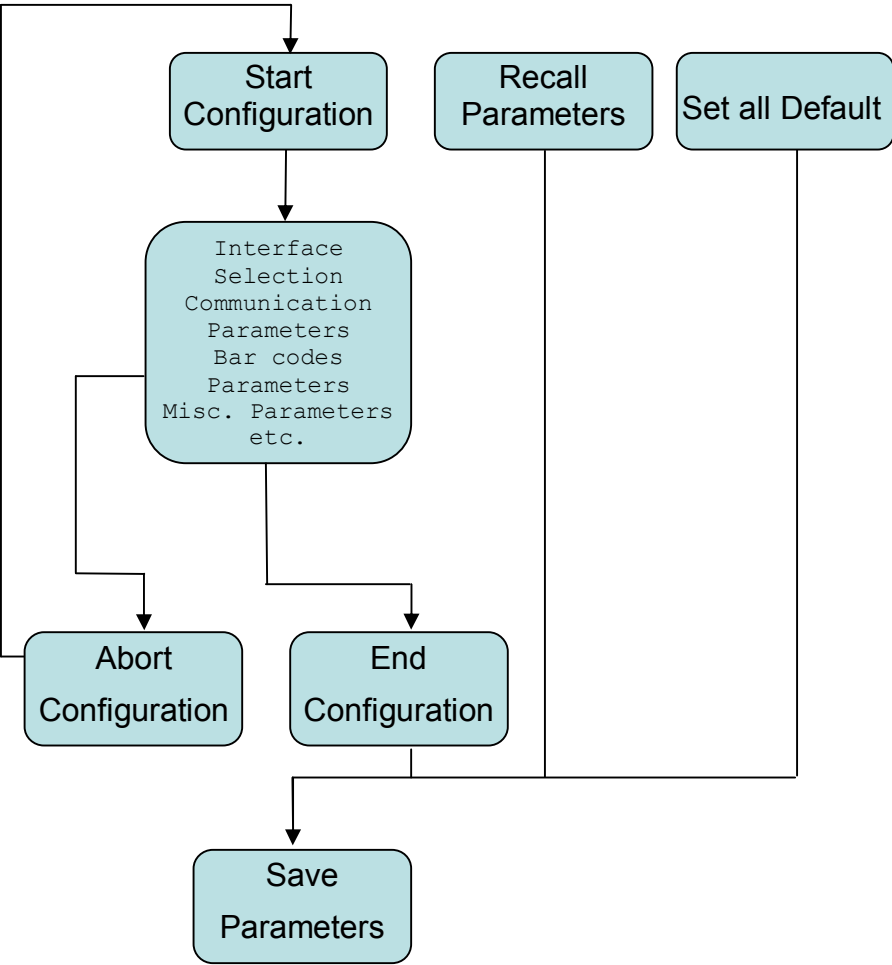
For changing the Baud rate to 38400 the following codes must be scanned successively:

Start configuration→Baud rate 38400→End configuration→
Save Parameters

After reading a valid programming code the scanner will give a double High beep and the green led indicator will lights on.

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

5.1.2 Programming Flow Chart



5.2 FACTORY DEFAULT SETTING

The **VEGA** is set default with the following settings:

RS232 COMMUNICATION	DEFAULT
Baud rate	9600
Parity	None
Data bits	8
Stop bits	1
RTS/CTS	Off
Postamble	<CR+LF>
DECODER SELECTION	DEFAULT
All UPC/EAN/JAN	On
Code 11	Off
Code 39	On
Code 39 Full ASCII	Off
Code 32 / Italian Pharmacy	Off
Code 128	On
Codabar/NW7	On
GS1 Databar RSS-14	Off
GS1 Databar Expanded	Off
GS1 Databar Limited	Off
Interleave 2 of 5	On
Industrial 2 of 5	Off
Matrix 2 of 5	Off
MSI/Plessey	Off
Telepen	Off
China Postage	Off
CODE IDENTIFIERS	DEFAULT
Code Identifiers	Off

The factory defaults settings are shown with <> and bold in the following chapters.

Chapter 6 Programming Codes

6.1 GENERAL PROCESS

1 Power up the Scanner

2 Scan the Start of Configuration bar code



3 Scan the bar code for the desired feature. You can scan all features before scanning End of Configuration.

4 Scan End of Configuration bar code



5 Scan Save Parameters bar code



6.1.1 Abort Configuration

Terminate current programming status.



6.1.2 Recall

Replace the current parameters by the parameters saved last time



6.1.3 Set All Default

Set all the parameters to the
factory default settings



6.1.4 Version Information

Display the Scanner Decoder version
information and date code



6.2 INTERFACE SELECTION

6.2.1 Interface

<Keyboard Mode>	
RS232 Mode	
USB Mode	

6.3 SCANNER OPERATION

6.3.1 Reading Mode

<Good Read OFF>	
Trigger ON/OFF	
Continuous/Trigger OFF	
Continuous/Auto Power ON	
Flash	

Flash/Auto Power ON



Testing



6.3.2 Good Read LED Control

<Good Read LED ON>



Good Read LED OFF



6.3.3 Beeper Option

<High>



Medium



Low



Off



6.3.4 Reading Level

Bar Equals High	
<Bar Equals Low>	

6.3.5 Accurany / Redundant Scan

<Original> - Require 1 good decode for a good scan	
1 Redundant Scan - Require 2 consecutive decodes of the same bar code data for a good scan	
2 Redundant Scan - Require 3 consecutive decodes of the same bar code data for a good scan	
3 Redundant Scan - Require 4 consecutive decodes of the same bar code data for a good scan	

6.3.6 Sensitivity of Continuous Reading

This Feature is working under Reading Mode > Continuous modes

<Fast>	
Slow	

6.3.7 Reverse Output Characters

Example: 012345 → 543210

Enable	
<Disable>	

6.4 RS232 MODE PARAMETERS

6.4.1 Baud Rate

1200	
2400	
4800	
<9600>	
19200	
38400	
57600	

6.4.2 Data/Stop Bits

The number of data bits transmitted for each character

7 Data Bits	
< 8 Data Bits >	
< 1 Stop Bits >	
2 Stop Bits	

6.4.3 Parity

A Parity bit is an extra data bit used to help catch data transmission errors.

<None>	
Even – Select to set the parity bit either a 1 or 0 to ensure an even number of bits are 1's	
Odd – Select to set the parity bit either a 1 or 0 to ensure an odd number of bits are 1's	
Mark – Select to set the parity bit always 1.	
Space– Select to set the parity bit always 0.	

6.4.4 Handshaking

RTS/CTS ON – Output a Request to Send (RTS) signal and wait for a Clear to Send (CTS) signal before transmitting data



RTS/CTS **<OFF>**



ACK/NAK – After transmitting data, wait for host to send an ACK or a NAK response. If ACK is received, then complete the data transmission. If NAK is received, re-send the last set of data and wait for ACK/NAK again.



ACK/NAK **<OFF>**



XON/XOFF – After transmitting data, wait for host to send an XON or a XOFF response. If XON is received, then complete the data transmission. If XOFF is received, stop the transmission.



XON/XOFF **<OFF>**



6.5 KEYBOARD WEDGE MODE PARAMETERS

6.5.1 Terminal Type

<IBM PC/AT,PS/2> - Includes IBM PS/2 and compatible models 50, 55, 60, 80	
IBM PC/XT	
IBM PS/2 25, 30	
IBM 5550	
IBM 102 Key	
IBM 122 Key (1)	
IBM 122 Key (2)	
NEC 9800	
Apple Desktop Bus (ADB)	

6.5.2 Country/Language

<US English>	
UK English	
Italian	
Spanish	
French	
German	
Swedish	
Switzerland	
Hungarian	
Japanese	
Belgium	

Portuguese	
Denmark	
Netherlands	
Turkey	

6.5.3 Upper/Lower Case

<No Change>	
Enable Lower Case - Transmit all data as lower case	
Enable Upper Case - Transmit all data as upper case	

6.5.4 Capslock Detection

Capslock Detection-Enable	
<Capslock Detection-Disbale>	

6.5.5 Character by ALT Method

ALT Method Enable



<ALT Method Disable>



6.5.6 Select Numerical Pad

Numerical Pad On



<Numerical Pad Off>



6.5.7 Interscan Code Delay

<No Delay>	
5 ms	
10 ms	
25 ms	
50 ms	
100 ms	
200 ms	
300 ms	

6.6 OUTPUT CHARACTERS

6.6.1 Select Terminator

<CR+LF> – The scanner transmits a carriage return and a line feed after each scan	
CR Suffix – The scanner transmits a carriage return after each scan	
LF Suffix – The scanner transmits a line feed after each scan	
Space	
Tab	
STX-ETX – RS232 only	
None	

6.7 CODE TYPE

6.7.1 Barcode Selections

If "Enable" is selected for all bar codes types, then the scanner could read all types of bar code. If "Disable" is selected for a certain bar code type, then the scanner could not read the particular bar code. The symbol of "<>" means default settings.

All Bar Codes ON	
UPC-A <ON>	
UPC-A OFF	
UPC-E <ON>	
UPC-E OFF	
EAN-13 / JAN-13 <ON>	
EAN-13 / JAN-13 OFF	
EAN-8 / JAN-8 <ON>	
EAN-8 / JAN-8 OFF	

CODE 39 <ON>



CODE 39 OFF



Standard Code 39 <ON>



Full ASCII Code 39 ON



Code32 / Italian Pharmacy ON



Code32 / Italian Pharmacy <OFF>



Code 128 <ON>



Code 128 OFF



Interleave 2 of 5 <ON>



Interleave 2 of 5 OFF



Codabar/NW7 <ON>



Codabar/NW7 OFF



Industrial 2 of 5 ON	
Industrial 2 of 5 <OFF>	
Matrix 2 of 5 ON	
Matrix 2 of 5 <OFF>	
CODE 93 ON	
CODE 93 <OFF>	
CODE 11 ON	
CODE 11 <OFF>	
MSI/PLESSEY ON	
MSI/PLESSEY <OFF>	
Telepen ON	
Telepen <OFF>	

China Postage ON	
China Postage <OFF>	
GS1 DataBar ON	
GS1 DataBar <OFF>	
GS1 DataBar Expanded ON	
GS1 DataBar Expanded <OFF>	
GS1 DataBar Limited ON	
GS1 DataBar Limited <OFF>	

6.8 UPC/EAN/JAN PARAMETERS

6.8.1 Reading Type

UPC-A=EAN-13 ON Add 0 before UPC-A to make it 13 digits.	
UPC-A = EAN-13 <OFF>	
ISBN Enable	
ISBN <Disable>	
ISSN Enable	
ISSN <Disable>	
Decode with Supplement	
<Auto Discriminate Supplement>	
Expand UPC-E Enable	
<Expand UPC-E Disable>	

EAN8=EAN13 Enable



<EAN8=EAN13 Disable>



GTIN Format Enable



<GTIN Format Disable>



6.8.2 Supplemental Setup

<Not Transmit>



2 Digit Supplemental



5 Digit Supplemental



2 & 5 Digit Supplemental



6.8.3 Check Digit Transmission

UPC-A Check Digit Transmission <ON>	
UPC-A Check Digit Transmission OFF	
UPC-E Check Digit Transmission <ON>	
UPC-E Check Digit Transmission OFF	
EAN-8 Check Digit Transmission <ON>	
EAN-8 Check Digit Transmission OFF	
EAN-13 Check Digit Transmission <ON>	
EAN-13 Check Digit Transmission OFF	
ISSN Check Digit Transmission <ON>	
ISSN Check Digit Transmission OFF	

6.9 CODE 39 PARAMETERS

6.9.1 Type of Code

<Standard Code 39>



Full ASCII Code 39



6.9.2 Check Digit Transmission

<Do Not Calculate Check Digit>



Calculate Check Digit and Transmit



Calculate Check Digit and Not
Transmit



6.9.3 Output Start/Stop Character

Enable



<Disable>



6.9.4 Decode Asterisk

Enable	
<Disable>	

6.9.5 Set Up Code Length

- To set the fixed length: (2 sets Available)
- 1. Scan the "Begin" programming code of the desired set
 - 2. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
 - 3. Scan the "Complete" programming code of the desired set.
- Repeat the steps 1 - 3 to set additional lengths.

<Variable>	
------------	---

Fixed Length 1st Set

1 st Set Begin	
Decimal Value	See Appendix A
1 st Set Complete	

Fixed Length 2nd Set

2 nd Set Begin	
Decimal Value	See Appendix A
2 nd Set Complete	

Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.10 CODE 128 PARAMETERS

6.10.1 Reading Type

UCC/EAN-128 Enable



<UCC/EAN-128 Disable>



6.10.2 Check Digit Transmission

Do Not Calculate Check Digit



Calculate Check Digit and Transmit



<Calculate Check Digit and Not
Transmit>



6.10.3 Append FNC2

ON



<OFF>



6.10.4 Set Up Code Length

To set the fixed length: (2 sets Available)

- 1. Scan the "Begin" programming code of the desired set
- 2. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
- 3. Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths

<Variable>



Fixed Length 1st Set

1st Set Begin



Decimal Value

See Appendix A

1st Set Complete



Fixed Length 2nd Set

2nd Set Begin



Decimal Value

See Appendix A

2nd Set Complete



Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.11 INTERLEAVE 2 OF 5 PARAMETERS

6.11.1 Check Digit Transmission

<Do Not Calculate Check Digit>



Calculate Check Digit and Transmit



Calculate Check Digit and Not
Transmit



6.11.2 Set Up Number of Character

<Even>



Odd



6.11.3 Brazilian Banking Code

Enable



<Disable>



6.11.4 Set Up Code Length

To set the fixed length: (2 sets Available)

- 1 Scan the "Begin" programming code of the desired set
- 2 Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
- 3 Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths

<Variable>	
Fixed Length 1st Set	
1 st Set Begin	
Decimal Value	See Appendix A
1 st Set Complete	
Fixed Length 2nd Set	
2 nd Set Begin	
Decimal Value	See Appendix A
2 nd Set Complete	

Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.12 INDUSTRIAL 2 OF 5 PARAMETERS

6.12.1 Reading Type

IATA25 Enable



<IATA25 Disable>



6.12.2 Check Digit Transmission

<Do Not Calculate Check Digit>



Calculate Check Digit and Transmit



Calculate Check Digit and Not
Transmit



6.12.3 Set Up Code Length

- To set the fixed length: (2 sets Available)
- 1 Scan the "Begin" programming code of the desired set
 - 2 Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
 - 3 Scan the "Complete" programming code of the desired set.
- Repeat the steps 1 - 3 to set additional lengths

<Variable>



Fixed Length 1st Set

1st Set Begin



Decimal Value

See Appendix A

1st Set Complete



Fixed Length 2nd Set

2nd Set Begin



Decimal Value

See Appendix A

2nd Set Complete



Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.13 MATRIX 2 OF 5 PARAMETERS

6.13.1 Check Digit Transmission

<Do Not Calculate Check Digit>



Calculate Check Digit and Transmit



Calculate Check Digit and Not
Transmit



6.13.2 Set Up Code Length

To set the fixed length: (2 sets Available)

- 1 Scan the "Begin" programming code of the desired set
- 2 Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
- 3 Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths

<Variable>



Fixed Length 1st Set

1 st Set Begin	
Decimal Value	See Appendix A
1 st Set Complete	

Fixed Length 2nd Set

2 nd Set Begin	
Decimal Value	See Appendix A
2 nd Set Complete	

Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.14 CODABAR/NW7 PARAMETERS

6.14.1 Set Up Start/Stop Characters upon Transmission

ON	
<OFF>	

6.14.2 Transmission Type of Start/Stop

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

C Start	
C Stop	
D Start	
D Stop	

6.14.3 Set Up Code Length

To set the fixed length: (2 sets Available)

- 1 Scan the "Begin" programming code of the desired set
- 2 Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
- 3 Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths

<Variable>	
-------------------------	---

Fixed Length 1st Set

1st Set Begin



Decimal Value

See Appendix A

1st Set Complete



Fixed Length 2nd Set

2nd Set Begin



Decimal Value

See Appendix A

2nd Set Complete



Minimum Length

Minimum Length Begin



Decimal Value

See Appendix A

Minimum Length Complete



6.15 CODE 93 PARAMETERS

6.15.1 Check Digit Transmission

Do Not Calculate Check Digit	
<Calculate Check 2 Digit and Not Transmit>	

6.15.2 Set Up Code Length

To set the fixed length: (2 sets Available)

- 1 Scan the "Begin" programming code of the desired set
- 2 Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
- 3 Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>	
Fixed Length 1 st Set	
1 st Set Begin	
Decimal Value	See Appendix A
1 st Set Complete	

Fixed Length 2nd Set

2 nd Set Begin	
Decimal Value	See Appendix A
2 nd Set Complete	

Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.16 CODE 11 PARAMETERS

6.16.1 Check Digit Transmission

<Do Not Calculate Check Digit>	
Calculate Check 1 Digit and Transmit	
Calculate Check 1 Digit and Not Transmit	
Calculate Check 2 Digit and Transmit	
Calculate Check 2 Digit and Not Transmit	

6.16.2 Set Up Code Length

- To set the fixed length: (2 sets Available)
- 1. Scan the "Begin" programming code of the desired set
 - 2. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
 - 3. Scan the "Complete" programming code of the desired set.
- Repeat the steps 1 - 3 to set additional lengths.

<Variable>	
------------	---

Fixed Length 1st Set

1st Set Begin



Decimal Value

See Appendix A

1st Set Complete



Fixed Length 2nd Set

2nd Set Begin



Decimal Value

See Appendix A

2nd Set Complete



Minimum Length

Minimum Length Begin



Decimal Value

See Appendix A

Minimum Length Complete



6.17 MSI/PLESSEY CODE PARAMETERS

6.17.1 Check Digit Transmission

<Do Not Calculate Check Digit>



Calculate Check Digit and Transmit



Calculate Check Digit and Not
Transmit



6.17.2 Set Up Code Length

To set the fixed length: (2 sets Available)

1. Scan the "Begin" programming code of the desired set
2. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
3. Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fixed Length 1st Set

1 st Set Begin	
Decimal Value	See Appendix A
1 st Set Complete	

Fixed Length 2nd Set

2 nd Set Begin	
Decimal Value	See Appendix A
2 nd Set Complete	

Minimum Length

Minimum Length Begin	
Decimal Value	See Appendix A
Minimum Length Complete	

6.18 TELEPEN PARAMETERS

6.18.1 Type of Code

Telepen ASCII <ON>



Telepen Numeric



6.18.2 Check Digit Transmission

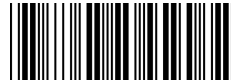
Do Not Calculate Check Digit



Calculate Check Digit and Transmit



**<Calculate Check Digit and Not
Transmit>**



6.18.3 Set Up Code Length

To set the fixed length: (2 sets Available)

4. Scan the "Begin" programming code of the desired set
5. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the length to be read.
6. Scan the "Complete" programming code of the desired set.

Repeat the steps 1 - 3 to set additional lengths.

<Variable>



Fixed Length 1st Set

1st Set Begin



Decimal Value

See Appendix A

1st Set Complete



Fixed Length 2nd Set

2nd Set Begin



Decimal Value

See Appendix A

2nd Set Complete



Minimum Length

Minimum Length Begin



Decimal Value

See Appendix A

Minimum Length Complete



6.19 GS1 DATABAR PARAMETERS

6.19.1 Check Digit Transmission

<Calculate Check Digit and Transmit>	
Calculate Check Digit and Not Transmit	

6.19.2 Application ID

<Transmit Application ID> Add 01 Before GS1 Databar	
Do Not Transmit Application ID	

6.19.3 Symbology ID

Transmit Symbology ID Add]e0 Before GS1 Databar.	
<Do Not Transmit Symbology ID>	

6.20 GS1 DATABAR LIMITED PARAMETERS

6.20.1 Check Digit Transmission

<Calculate Check Digit and
Transmit>



Calculate Check Digit and Not
Transmit



6.20.2 Application ID

<Transmit Application ID>
Add 01 Before GS1 Databar Limited.



Don't Transmit Application ID



6.20.3 Symbology ID

Transmit Symbology ID
Add je0 Before GS1 Databar Limited.

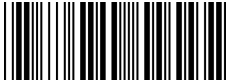


<Don't Transmit Symbology ID>



6.21 GS1 DATABAR EXPANDED PARAMETERS

6.21.1 Symbology ID

Transmit Symbology ID Add je0 Before GS1 Databar Expanded.	
<Don't Transmit Symbology ID>	

Chapter 7 Miscellaneous Parameters

7.1 BAR CODE ID

7.1.1 Default Barcode ID

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 barcode is being scanned.

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 2 of 5	G	Industrial 2 of 5	H
Matrix 2 of 5	I	Codabar/NW7	J
Code 93	K	Code 11	L
China Postage	M	MSI/Plessey	N
Telepen	T	GS1 DataBar	U
GS1 DataBar Lim.	V	GS1 DataBar Exp.	W

Bar Code ID ON	
Bar Code ID <OFF>	
Default – Return from User Define to Default	

7.1.2 User Define Code ID

To set the code ID

- 1. Scan the symbologies programming code.
- 2. Go to the ASCII Tables in Appendix B, Scan programming codes that represents the desired ID.

Note: User defines 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	
UPC-E	
EAN-13/JAN-13	
EAN-8/JAN-8	
CODE 39	
CODE 128	
Codabar/NW7	
Interleave 2 of 5	

Industrial 2 of 5	
Matrix 2 of 5	
CODE 93	
CODE 11	
China Postage	
MSI/PLESSEY	
Telepen	
GS1 DataBar	
GS1 DataBar Expanded	
GS1 DataBar Limited	

7.2 PREAMBLES AND POSTAMBLES INSERTION

7.2.1 Setup Insertion

To set the insertion of the output characters;

- 1. Scan the programming code of the desired set.
- 2. Scan the programming code of the desired symbology
- 3. Go to the Decimal Value in Appendix A, scan programming codes that represents the desired position to be inserted (1= the first digit, 99 the last digit).
- 4. Scan the "Complete" programming code of "Character Position to be Inserted".
- 5. Go to the ASCII Tables in Appendix C, Scan programming codes that represents the desired characters to be inserted.
- 6. Scan the "Complete" programming code of "Characters to be Inserted".

Repeat the steps 1 - 6 to set additional insertion.

Example: Insert \$ as Preamble for Code UPC-A.

Start Configuration	
1 st Set	
Code UPC-A	
1st Digit	

Complete	
\$	
Complete	
End of Configuration Bar Code	
Save Parameters Bar Code	

7.2.2 Insertion Set Number

1 st Set	
2 nd Set	
3 rd Set	
4 th Set	
5 th Set	
6 th Set	

7.2.3 Symbologies Selection

UPC-A	
UPC-E	
EAN-13/JAN-13	
EAN-8/JAN-8	
CODE 39	
CODE 128	
Codabar/NW7	
Interleave 2 of 5	
Industrial 2 of 5	
Matrix 2 of 5	
CODE 93	

CODE 11	
China Postage	
MSI/PLESSEY	
Telepen	
GS1 DataBar RSS-14	
GS1 DataBar Expanded	
GS1 DataBar Limited	
All Codes	
None	

7.2.4 Character Position to be Insertion

Decimal Value	See Appendix A
---------------	----------------

Complete



7.2.5 Characters to be Inserted

ASCII Table	See Appendix B and C
-------------	----------------------

Complete



7.3 CHARACTER DELETION

To setup the deletion of output characters:

- 1. Scan the programming code of the desired set.
- 2. Scan the programming code of the desired symbology.
- 3. Go to the decimal Value tables in Appendix A, scan programming codes that represents the desired position to be deleted.
- 4. Scan the "Complete" programming code of "Character Position to be Deleted".
- 5. Go to the Decimal Value Tables in Appendix A, scan programming codes that represents the number of characters to be deleted.
- 6. Scan the "Complete" programming code of "Number of Characters to be deleted".

Repeat the steps 1 - 6 to set additional deletion.

Example: Delete first 3 codes for Code EAN-13.

Start Configuration	
1 st Set	
Code EAN-13	
1st Digit - Delete From the 1 st Digit	
Complete	

3 – Delete 3 Characters	
Complete	
End of Configuration Bar Code	
Save Parameters Bar Code	

7.3.1 Deletion Set Number

1 st Set	
2 nd Set	
3 rd Set	
4 th Set	
5 th Set	
6 th Set	

7.3.2 Code Type to be Delete

UPC-A	
UPC-E	
EAN-13/JAN-13	
EAN-8/JAN-8	
CODE 39	
CODE 128	
Codabar/NW7	
Interleave 2 of 5	
Industrial 2 of 5	
Matrix 2 of 5	
CODE 93	

CODE 11	
China Postage	
MSI/PLESSEY	
Telepen	
GS1 DataBar	
GS1 DataBar Expanded	
GS1 DataBar Limited	
All Codes	
None	

7.3.3 Character Position to be Delete

Decimal Value	See Appendix A
---------------	----------------

Complete	
----------	---

7.3.4 Number of Characters to be Delete

Decimal Value	See Appendix A
---------------	----------------

Complete	
----------	---

Appendixes

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A. DECIMAL VALUE TABLE

 0	 1
 2	 3
 4	 5
 6	 7
 8	 9

B. ASCII TABLE

NULL		SOH	
STX		ETX	
EOT		ENQ	
ACK		BEL	
BS		HT	
LF		VT	
FF		CR	
SO		SI	
DLE		DC1	
DC2		DC3	

DC4		NAK	
SYN		ETB	
CAN		EM	
SUB		ESC	
FS		GS	
RS		US	
SPACE		!	
"		#	
\$		%	
&		'	
(		)	

*		+	
, Comma		- minus	
. period		/	
0 Number Zero		1 Number One	
2		3	
4		5	
6		7	
8		9	
:		;	
< Less than		=	
> Greater than		?	

@		A	
B		C	
D		E	
F		G	
H		I Letter I	
J		K	
L		M	
N		O Letter O	
P		Q	
R		S	
T		U	

V		W	
X		Y	
Z		[	
\		]	
^		— Underscore	
`		a	
b		c	
d		e	
f		g	
h		i	
j		k	

l		m	
n		o	
p		q	
r		s	
t		u	
v		w	
x		y	
z		{	
 Vertical slash		}	
~		DEL	

C. FUNCTION KEY TABLE

F1		F7	
F2		F8	
F3		F9	
F4		F10	
F5		F11	
F6		F12	
Insert		Delete	
Home		End	
Page Up		Page Down	
Left		Right	

Up		Down	
----	---	------	---

D. READABLE SYMBOLOGIES

1D Symbolologies

Symbology	Default	Enable	Note
Codabar/NW7	On		
Code 11	Off		
Code 32 / Italian Pharmacy	Off		
Code 39	On		
Code 93	Off		
Code 128	On		
EAN 8 / EAN 13	On		
EAN 128	On		
GS1 DataBar(RSS)	Off	Omni, Expanded, limited	
Interleave 2 of 5	On		
Industrial 2 of 5	Off		
ISBN	Off		
ISSN	Off		
Matrix 2 of 5	Off		
MSI / PLESSEY	Off		
China Postage	off		
Telepen	Off		
UPC A / UPC E	On		

E. TECHNICAL SPECIFICATIONS

Physical Characteristics Scanner

Scanner Weight (V-1010)	Approx 240 gr.
Material	ABS Plastic
Connector	RJ 45C 10Pins
Dimension	186.8 mm x 81.6 mm x 63.9 mm

Operational

Light source	639 nm
Scan rate	700 scans/sec $\pm 10\%$
Reading Distance	270 mm
Width of Field	80 mm
Scan Angle	Forward & Backward $\pm 70^\circ$ Left & Right $\pm 60^\circ$ Dead Zone $\pm 5^\circ$
Interface	RS232, KBW (PS/2), USB
V-1010 Indicators (led)	Green = good read

Electrical Characteristics (V-1010 wired model)

Operation Voltage	5 VDC $\pm 5\%$
Current Operating	140 mA (max) @ 5 VDC
Current Standby	50 mA typical @ 5 VDC
AC transformers	5.2 VDC @ 650 mA / Input AC 100-240V

Environmental

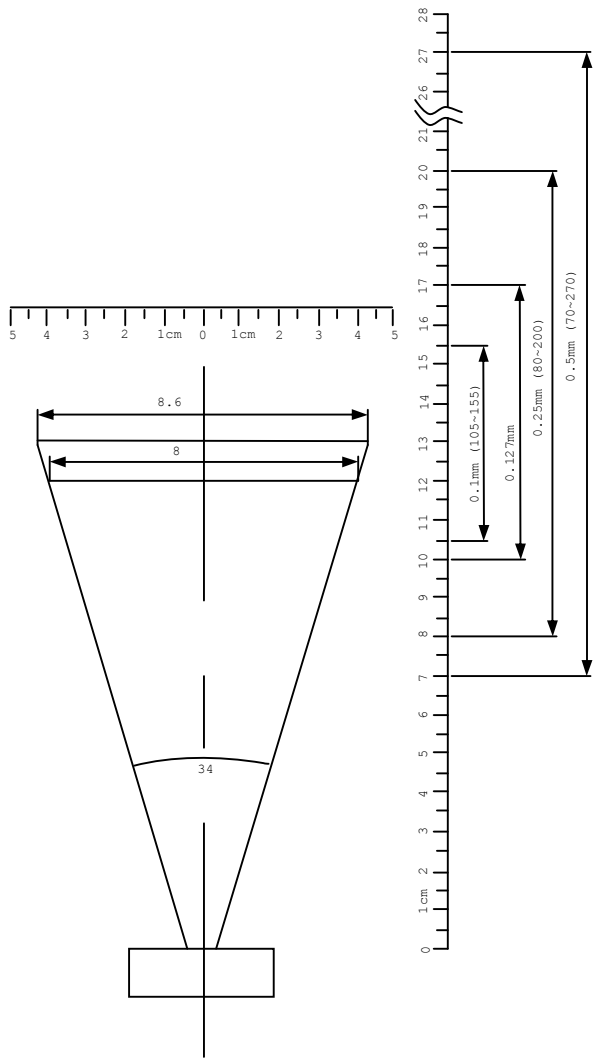
Operating Temp.	0°C to 50°C (32°F to 122°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Relative Humidity	20 to 95% non-condensing
Ambient light	100,000 LUX max @ Direct sun Light

Regulatory of Compliance

FCC
CE
RoHs

F. SCAN MAP

Typical Reading Distances



VEGA Typical Reading Distances (Centimetres)

Symbology	Density	Minimum Distance	Maximum Distance
Code 39	0.1 mm	10.5 cm	15.5 cm
	0.127 mm	10 cm	17 cm
	0.25 mm	8 cm	20 cm
	0.5 mm	7 cm	27 cm

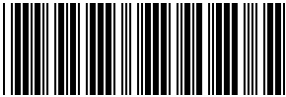
VEGA Typical Reading Distances (inches)

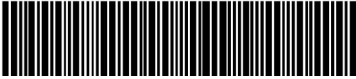
Symbology	Density	Minimum Distance	Maximum Distance
Code 39	4 mils	4.1 inch	6.1 inch
	5 mils	3.9 inch	6.7 inch
	10 mils	3.2 inch	7.9 inch
	20 mils	2.8 inch	10.6 inch

G. TEST SYMBOLOGIES

Scan one or more of these bar codes to test bar code symbologies you enabled.

1D Symbology

Codabar/NW7 	CODE 11 
CODE 39 	CODE 93 
CODE 128 	EAN 8  1234 5670
EAN 13  1 234567 890128	Interleave 2 of 5 
ISBN  8 712345 123451 12121	ISSN  ISSN 1234-5679 9 771234 567003 >
GS1 DataBar 	GS1 DataBar Expanded 
GS1 Databar Limited 	MSI / Plessey 

Matrix 2 of 5 	Industrial 2 of 5 
UPC A  o 12345 67890 s	UPC E  o 123456 s
Telepen 	China Postage 

H. OVERVIEW MODEL NUMBERS

VEGA with Linear Imager

Version with RS232 interface:

1. A271002 VEGA V-1010-02

Version with KBW interface:

2. A271003 VEGA V-1010-03

Version with USB (HID KBW) interface:

3. A271004 VEGA V-1010-04

Version with USB (virtual com port) interface:

4. A271005 VEGA V-1010-05

Quick Configuration

Start Configuration



<Select your Settings>

End Configuration



Save Parameters



Set All Defaults



Recall Stored Parameters



Abort Configuration



Version Information



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