



# **ION Linear**

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Barcode Scanner

User's Guide

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## Chapter 1 - System Information

### 1.1 About this manual

This User's Guide provides detailed programming instructions. Barcode scanners are factory programmed for the most common communication settings. If you need to change these settings, programming is accomplished by scanning the barcodes in this guide.

### 1.2 How to set up the parameter -I

- (1) Scan Start Configuration
- (2) Scan all necessary barcodes
- (3) Scan End Configuration to end the programming



Start configuration



End configuration



Standard Product Defaults Setting



Check Version

An asterisk (\*) next to an option indicates the default setting.

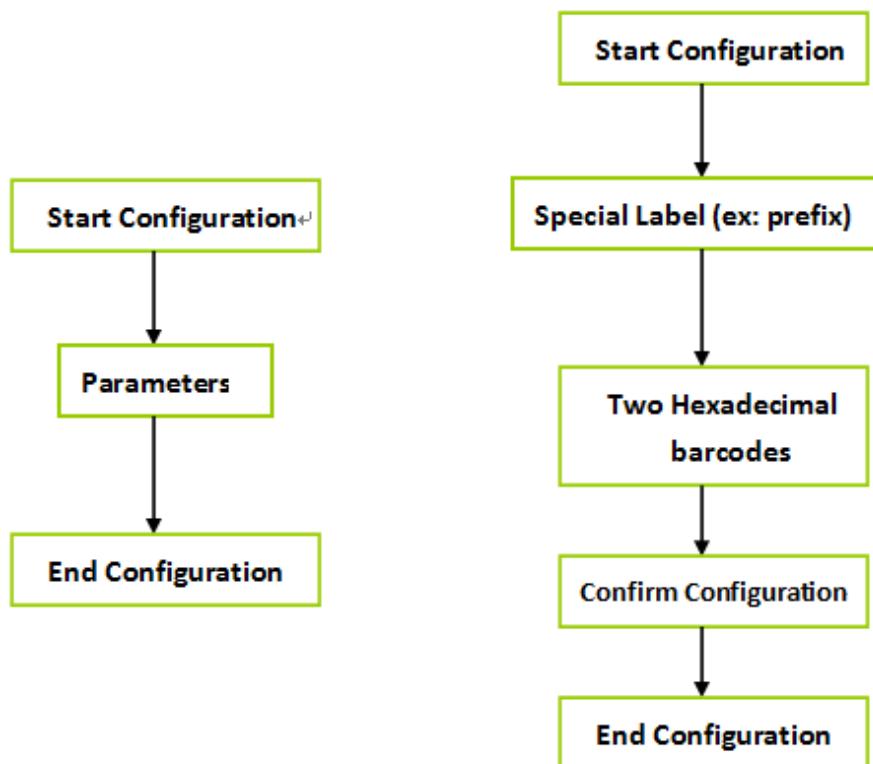
### 1.3 How to set up the parameter - II

Generally, you will only need to scan one barcode for most parameters.

You will hear two beeps when you successfully set the new values. In some cases, when using special parameters you may need to read more than one barcode. For example:

- ◆ Hexadecimal barcodes, such as, prefix or suffix
- ◆ Numeric barcode, such as, inter-character delay or min/max length.

To complete the change, you will need to scan the "Confirm" barcode after you scan the parameter barcode. Below is the flow chart to explain two different configurations.



## Chapter 2 - System setup

### 2.1 Interface selection

The scanner is designed to switch easily from interfaces.

No configuration is required for USB interface. Simply plug the scanner in and you are ready to scan.



Start configuration



End configuration

---

| ITEM | OPTION |
|------|--------|
|------|--------|



KEYBOARD

---



RS-232

---

Interface Selection



\* USB

---



USB COM

---

### 2.1.1 Keyboard emulation parameters setting



Start configuration



End configuration

| ITEM                          | OPTION   |
|-------------------------------|----------|
|                               |          |
|                               |          |
|                               |          |
|                               |          |
| Device Selection for keyboard | IBM 5550 |
| Interface                     |          |
|                               |          |
|                               |          |
|                               |          |



Start configuration



End configuration

| ITEM                            | OPTION |
|---------------------------------|--------|
|                                 |        |
|                                 |        |
|                                 |        |
|                                 |        |
| Language for Keyboard Interface |        |
|                                 |        |
|                                 |        |
|                                 |        |



Start configuration



End configuration

| ITEM                      | OPTION    |
|---------------------------|-----------|
| Function Key              | * Disable |
|                           | Enable    |
| Emulate External Keyboard | * Disable |
|                           | Enable    |
| ALT Mode                  | * Disable |
|                           | Enable    |

#### NOTE : Emulate External Keyboard

Scan the “Enable” barcode if you do not have an external keyboard.  
After scanning the Enable barcode, you will need to restart your computer.



Start configuration



End configuration

| ITEM                                    | OPTION                 |
|---|------------------------|
| Caps Lock                               | * Disable              |
|   | Enable                 |
| Num Lock                                | * Disable              |
|   | Enable                 |
| Inter Character Delay<br>(Default : 00) | Ref: Appendix (00—64H) |

### KC-5200 Presentation Mode



Start configuration



Presentation mode



End configuration



Start configuration



End configuration

| ITEM  | OPTION                   |
|---|--------------------------|
|   |                          |
|   | None                     |
|   |                          |
| * CR  |                          |
| Terminator                                      |                          |
|   | Tab                      |
|   |                          |
|   | ESC                      |
|   |                          |
| CR + LF   |                          |
| Block transmission delay<br>(Default : 00)      |                          |
|   | Ref: Appendix ( 00—0AH ) |
| Keyboard Speed<br>(Default 00: high clock rate) |                          |
|   | Ref: Appendix ( 00—08H ) |

### 2.1.2 RS-232 communication setting



Start configuration



End configuration

| ITEM      | OPTION    |
|-----------|-----------|
|           |           |
|           | 1200bps   |
|           |           |
|           | 2400bps   |
| Baud Rate |           |
|           | 4800bps   |
|           |           |
|           | * 9600bps |
|           |           |
|           | 19200bps  |
|           |           |
|           | 38400bps  |
| Data Bits |           |
|           | 7 Bits    |
|           |           |
|           | * 8 Bits  |



Start configuration



End configuration

| ITEM      | OPTION        |
|-----------|---------------|
| Stop Bits | * 1 Stop Bits |
|           | 2 Stop Bits   |
|           | * NONE        |
| Parity    | ODD           |
|           | EVEN          |
|           | Mark          |
|           | Space         |



Start configuration



End configuration

| ITEM                                       | OPTION                     |
|--|----------------------------|
| Inter-character delay<br>(Default : 00)    | <br>Ref: Appendix (00—64H) |
| Block transmission delay<br>(Default : 00) | <br>Ref: Appendix (00-0AH) |
| Response delay<br>(Default : 00)           | <br>Ref: Appendix (00-0AH) |
|  |                            |
| Handshaking                                | <br>RTS/CTS                |
|  | <br>ACK/NAK                |
|  | <br>Xon/Xoff               |



Start configuration



End configuration

| ITEM       | OPTION  |
|------------|---------|
|            |         |
|            | None    |
|            |         |
|            | * CR+LF |
|            |         |
| CR         |         |
| Terminator |         |
| For RS-232 | RS-232  |
|            |         |
|            | LF      |
|            |         |
| Tab        |         |
|            |         |
|            | STX/ETX |
|            |         |
|            | EOT     |



Start configuration



End configuration

| ITEM        | OPTION |
|-------------|--------|
|             |        |
| Handshaking |        |
|             |        |
|             |        |

## 2.2 Scanning mode selection



Start configuration



End configuration

| ITEM         | OPTION |
|--------------|--------|
|              |        |
|              |        |
|              |        |
|              |        |
| Reading Mode |        |
|              |        |
|              |        |
|              |        |

## 2.3 Beeper tone selection



Start configuration



End configuration

| ITEM                                   | OPTION                     |
|--|----------------------------|
| Beep Tone<br>(Default : 09H)           | <br>Ref: Appendix (00-10H) |
| Beep Sound Duration<br>(Default : 05H) | <br>Ref: Appendix (00-10H) |
| Power On Beeper                        | <br><br>* Enable           |
| Beeper                                 | <br><br>Disable            |
|  | <br><br>* ON               |
|  | <br><br>OFF                |

## 2.4 String Options (Prefix & Suffix)

This section describes the alterations which can be made to the format of the transmitted data string. A prefix and suffix, 10 characters maximum, may be included in front of or at the end of a scanned barcode.

### **Format**

{Prefix} {Code ID} {Bar Code} {Suffix}

### **How to set up a prefix?**

To configure “##” as prefix

- (1) Scan Start Configuration barcode
- (2) Scan Preamble barcode
- (3) Scan ‘#’ twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End Configuration barcode.

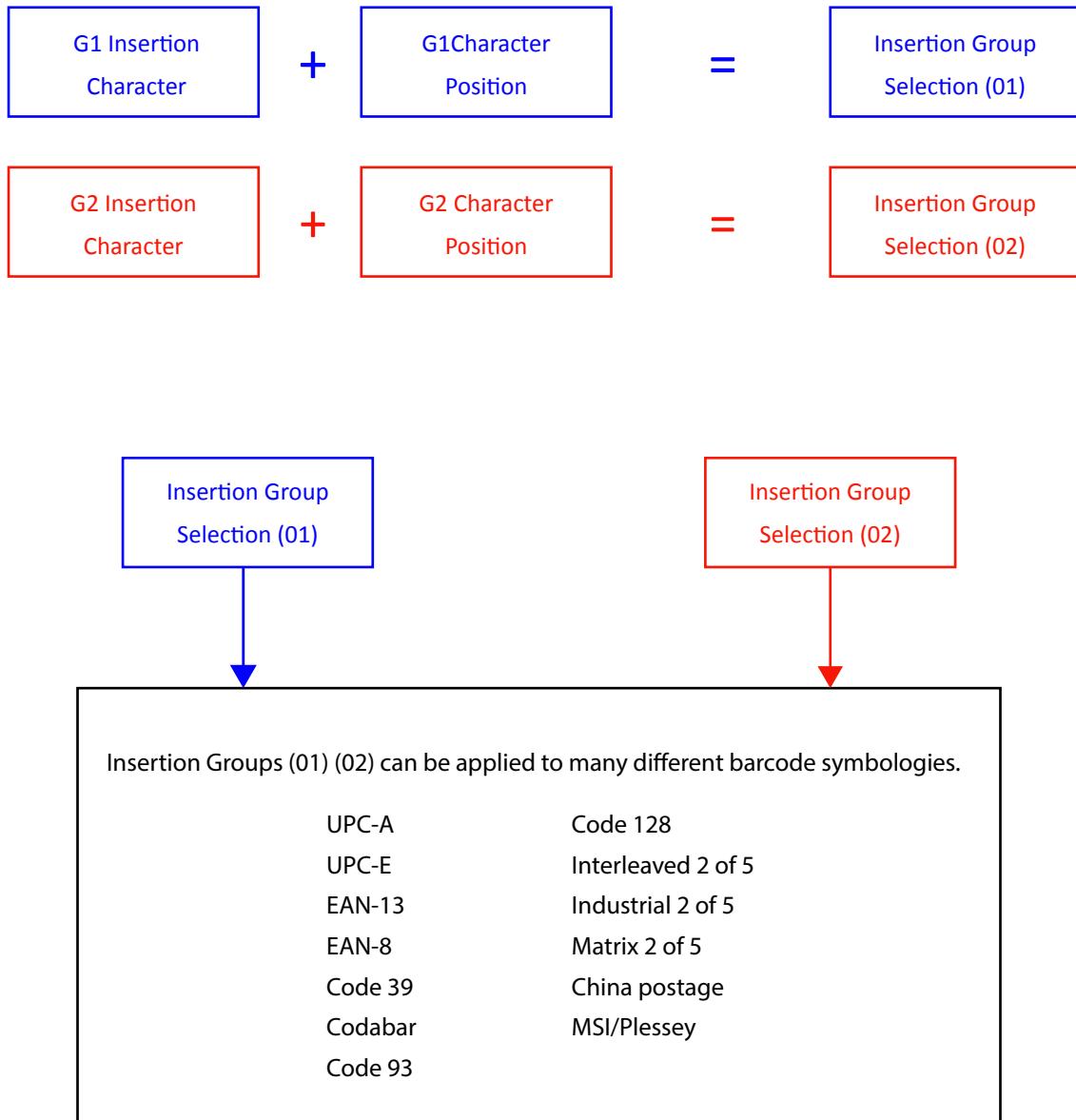
### **How to set up a suffix?**

To configure “\$\$” as suffix

- (1) Start configuration barcode
- (2) Scan Postamble barcode
- (3) Scan ‘\$’ twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode.

## 2.5 Setup Insertion

This section describes how to setup the insertion of output.



NOTE :

Max. 10 charters can be inserted each time

Max. Insertion group is two

Insertion Group (01) or (02) can be used on different barcode symbologies at the same time

**Example:**



To insert character “A” before the third digit(3)

Final Output will be: 12A3456789

**How to set up a character you want to insert**

- (1) Scan Start Configuration barcode
- (2) Scan “G1 Insertion character”
- (3) Scan “4” and “1” from FULL ASCII Table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode

**How to set up position you wish to place the character**

- (6) Scan Start Configuration barcode
- (7) Scan “G1 Character Position”
- (8) Scan “0” and “3” from FULL ASCII Table (which represents the position)
- (9) Scan Confirm configuration barcode
- (10) Scan End configuration barcode

**How to set up insertion for code 39**

Go to chapter 3.5 (code 39)

- (11) Scan Start Configuration barcode
- (12) Scan “Insert group selection” barcode
- (13) scan “0” and “1” from FULL ASCII Table  
(which presents the group- 01 you just set up previously)
- (14) Scan Confirm configuration barcode
- (15) Scan End configuration barcode



Start configuration



End configuration



Confirm configuration

| ITEM   | OPTION            |
|--|-------------------|
| Preamble<br>(Default : 00)                             | <br>Ref: Appendix |
| Postamble<br>(Default : 00)                            | <br>Ref: Appendix |
| G1 Insertion character<br>(Default : 00)               | <br>Ref: Appendix |
| G2 Insertion character<br>(Default : 00)               | <br>Ref: Appendix |
| G1 Character Position to be<br>inserted (Default : 00) | <br>Ref: Appendix |
| G2 Character Position to be<br>inserted (Default : 00) | <br>Ref: Appendix |



Start configuration



End configuration

| ITEM        | OPTION          |
|-------------|-----------------|
| Bar Code ID |                 |
|             | * Disable       |
|             |                 |
|             | Enable          |
| Accuracy    |                 |
|             | * Read 1 Time   |
|             |                 |
| Reading     |                 |
|             | Bar equals high |
|             |                 |
|             | Bar equals low  |

| Code Type | ID | Code Type         | ID |
|-----------|----|-------------------|----|
| UPC-A     | F  | Interleaved 25    | N  |
| UPC-E     | G  | Industrial 25     | O  |
| EAN-13    | H  | Matrix 25         | P  |
| EAN-8     | I  | China Postal Code | Q  |
| Code 39   | J  | MSI/Plessey       | R  |
| Codabar   | K  | Code 32           | S  |
| Code 93   | L  | Code 11           | T  |
| Code 128  | M  | Telepen           | V  |

## Chapter 3 - Barcode parameters setting

### How to set up a Code ID?

- (1) Scan Start configuration barcode
- (2) Go to the ASCII Table and scan the barcodes that represent the characters you want inserted.
- (3) Scan Confirm configuration barcode
- (4) Scan End configuration barcode



Start configuration



End configuration



Confirm configuration

### 3.1 UPC-A

| ITEM                              | OPTION   |
|-----------------------------------|--|
| Read                              | A standard linear barcode representing the 'Disable' option for reading. |
|                                   | Disable  |
| Code ID Setting<br>(Default : F ) | A standard linear barcode representing the 'Enable' option for reading.  |
|                                   | * Enable   |
|                                   | A standard linear barcode representing the reference to Appendix 20-7EH. |
|                                   | Ref: Appendix (20-7EH)   |



Start configuration



End configuration

| ITEM                             | OPTION                 |
|----------------------------------|------------------------|
| UPC-A Expand to EAN-13           | * Disable              |
|                                  | Enable                 |
| Check Digit Send                 | Disable                |
|                                  | * Enable               |
| Truncate Leading Zero            | * Disable              |
|                                  | Enable                 |
| Truncate Leading<br>(Default:00) | Ref: Appendix (00-0DH) |
| Truncate Ending<br>(Default:00)  | Ref: Appendix (00-0DH) |
| Insert group selection           | Ref: Appendix (00—02H) |



Start configuration



End configuration

| ITEM              | OPTION                       |
|-------------------|------------------------------|
|                   |                              |
|                   | * NONE                       |
|                   |                              |
|                   | 2 digits                     |
| Supplement digits |                              |
|                   | 5 digits                     |
|                   |                              |
|                   | 2 or 5digits                 |
|                   |                              |
|                   | Auto-discriminate Supplement |

### 3.2 UPC-E



Start configuration



End configuration

| ITEM                             | OPTION |
|----------------------------------|--------|
| Read                             |        |
|                                  |        |
| Code ID setting<br>(Default : G) |        |



Start configuration



End configuration

| ITEM                                   | OPTION                 |
|--|------------------------|
| UPC-E Expand to UPC-A                  | * Disable              |
|  | Enable                 |
| Check Digit Send                       | Disable                |
|  | * Enable               |
| Truncate Leading<br>(Default:00)       | Ref: Appendix (00-08H) |
| Truncate Ending<br>(Default:00)        | Ref: Appendix (00-08H) |
| Insert group selection<br>(Default:00) | Ref: Appendix (00-02H) |



Start configuration



End configuration

| ITEM                  | OPTION                       |
|-----------------------|------------------------------|
|                       |                              |
| Truncate Leading Zero | * Disable                    |
|                       |                              |
|                       | Enable                       |
|                       |                              |
|                       | * None                       |
|                       |                              |
|                       | 2 digits                     |
| Supplement digits     |                              |
|                       | 5 digits                     |
|                       |                              |
|                       | 2 or 5 digits                |
|                       |                              |
|                       | Auto-discriminate Supplement |

### 3.3 EAN-13



Start configuration



End configuration

| ITEM                                | OPTION       |
|-------------------------------------|--------------|
| Read                                | <br>Disable  |
|                                     | <br>* Enable |
| Code ID setting<br>(Default : H)    |              |
| Ref: Appendix (20-7EH)              |              |
| Check Digit Send                    | <br>Disable  |
|                                     | <br>* Enable |
| Truncate Leading<br>(Default : 00 ) |              |
| Ref: Appendix (00-0DH)              |              |
| Truncate Ending<br>(Default : 00 )  |              |
| Ref: Appendix (00-0DH)              |              |



Start configuration



End configuration

| ITEM                                      | OPTION                 |
|---|------------------------|
|   |                        |
|   | * None                 |
|   |                        |
|   | 2 digits               |
| Supplement digits                         |                        |
|   | 5 digits               |
|   |                        |
|   | 2 or 5 digits          |
|   |                        |
| Auto-discriminate Supplement              |                        |
| ISBN/ISSN Conversion                      |                        |
|   | * Disable              |
|   |                        |
| Enable                                    |                        |
| Insert group selection<br>(Default : 00 ) |                        |
|   | Ref: Appendix (00-02H) |

### 3.4 EAN-8



Start configuration



End configuration

| ITEM                               | OPTION   |
|------------------------------------|--|
| Read                               | <br>Disable                  |
|                                    | <br>* Enable                 |
| Code ID setting<br>(Default : I)   | <br>Ref: Appendix (20-7EH)  |
| Check Digit Send                   | <br>Disable                |
|                                    | <br>* Enable               |
| Truncate Leading<br>(Default : 00) | <br>Ref: Appendix (00-08H) |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-08H) |
|  |                            |
|  |                            |
| Supplement digits                        |                            |
|  |                            |
|  |                            |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.5 Code39



Start configuration



End configuration

| ITEM                             | OPTION                 |
|----------------------------------|------------------------|
| Read                             |                        |
|                                  | Disable                |
|                                  |                        |
| * Enable                         |                        |
| Code ID setting<br>(Default : J) |                        |
|                                  | Ref: Appendix (20-7EH) |
| Check-sum verification           |                        |
|                                  | * Disable              |
|                                  |                        |
| Enable                           |                        |
| Check-sum transmission           |                        |
|                                  | Disable                |
|                                  |                        |
|                                  | * Enable               |



Start configuration



End configuration

| ITEM                               | OPTION                 |
|------------------------------------|------------------------|
| Append                             | * Disable              |
|                                    | Enable                 |
| Min. code length<br>(Default: 00)  | Ref: Appendix (00-32H) |
| Max. code length<br>(Default: 32H) | Ref: Appendix (00-32H) |
| Format                             | * Standard Code39      |
|                                    | Code 39 Full ASCII     |



Start configuration



End configuration

| ITEM                                    | OPTION                 |
|---|------------------------|
| Transmit Start/End Character            | * Disable              |
|   | Enable                 |
| Truncate Leading<br>(Default: 00)       | Ref: Appendix (00-32H) |
| Truncate Ending<br>(Default: 00)        | Ref: Appendix (00-32H) |
| Insert group selection<br>(Default: 00) | Ref: Appendix (00-02H) |

### 3.6 Codabar



Start configuration



End configuration

| ITEM                             | OPTION                     |
|----------------------------------|----------------------------|
|                                  |                            |
| Read                             | Disable                    |
|                                  |                            |
|                                  | * Enable                   |
| Code ID setting<br>(Default : K) | <br>Ref: Appendix (20-7EH) |



Start configuration



End configuration

| ITEM                             | OPTION                     |
|----------------------------------|----------------------------|
|                                  |                            |
| Check-sum verification           | Disable                    |
|                                  |                            |
|                                  | * Enable                   |
|                                  |                            |
| Check-sum transmission           | * Disable                  |
|                                  |                            |
|                                  | Enable                     |
|                                  |                            |
| Append                           | * Disable                  |
|                                  |                            |
|                                  | Enable                     |
| Truncate Leading<br>(Default:00) | <br>Ref: Appendix (00-7EH) |



Start configuration



End configuration

| ITEM                              | OPTION                     |
|-----------------------------------|----------------------------|
| Truncate Ending<br>(Default:00)   | <br>Ref: Appendix (00-7EH) |
| Start/End type                    | <br><br>                   |
| Start/End transmission            | <br>                       |
| Min. code length<br>(Default: 05) | <br>Ref: Appendix (00-3CH) |



Start configuration



End configuration

| ITEM                                    | OPTION                     |
|---|----------------------------|
| Max. code length<br>(Default: 3CH)      | <br>Ref: Appendix (00-3CH) |
| Insert group selection<br>(Default: 00) | <br>Ref: Appendix (00-02H) |

### 3.7 Code93



Start configuration



End configuration

| ITEM                             | OPTION   |
|----------------------------------|--|
| Read                             |                            |
|                                  | Disable  |
|                                  |                            |
|                                  | * Enable   |
| Code ID setting<br>(Default : L) | <br>Ref: Appendix (20-7EH) |
| Check-sum verification           |                          |
|                                  | Disable  |
|                                  |                          |
|                                  | * Enable   |



Start configuration



End configuration

| ITEM                               | OPTION                     |
|------------------------------------|----------------------------|
|                                    |                            |
| Check-sum transmission             | * Disable<br>              |
| Min. code length<br>(Default: 00)  |                            |
| Max. code length<br>(Default: 50H) | <br>Ref: Appendix (0-50H)  |
| Truncate Leading<br>(Default: 00)  |                            |
| Truncate Ending<br>(Default: 00)   | <br>Ref: Appendix (00-7EH) |
| Insert group selection             |                            |

### 3.8 Code 128



Start configuration



End configuration

| ITEM                             | OPTION                     |
|----------------------------------|----------------------------|
|                                  |                            |
| Read                             | Disable                    |
|                                  |                            |
|                                  | * Enable                   |
| Code ID setting<br>(Default : M) | <br>Ref: Appendix (20-7EH) |
| Check-sum verification           | <br>Disable                |
|                                  | <br>* Enable               |



Start configuration



End configuration

| ITEM                   | OPTION    |
|------------------------|-----------|
|                        |           |
| Check-sum transmission | * Disable |
|                        |           |
|                        | Enable    |
|                        |           |
| FNC2 Append            | * Disable |
|                        |           |
|                        | Enable    |
|                        |           |
| UCC/EAN128             | * Disable |
|                        |           |
|                        | Enable    |
|                        |           |
| FNC1 transmission      | * Disable |
|                        |           |
|                        | Enable    |



Start configuration



End configuration

| ITEM                                    | OPTION                     |
|---|----------------------------|
| Truncate Leading<br>(Default: 00)       | <br>Ref: Appendix (00-7FH) |
| Truncate Ending<br>(Default: 00)        | <br>Ref: Appendix (00-7FH) |
| Min. code length<br>(Default: 00)       | <br>Ref: Appendix (00-7FH) |
| Max. code length<br>(Default: 7FH)      | <br>Ref: Appendix (00-7FH) |
| Insert group selection<br>(Default: 00) | <br>Ref: Appendix (00-02H) |

### 3.9 Interleaved 2 of 5



Start configuration



End configuration

| ITEM                             | OPTION |
|----------------------------------|--------|
| Read                             |        |
|                                  |        |
| Code ID setting<br>(Default : N) |        |
| Check-sum verification           |        |
|                                  |        |
| Check-sum transmission           |        |
|                                  |        |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-7EH) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-7EH) |
| Min. code length<br>(Default : 00)       | <br>Ref: Appendix (00-7FH) |
| Max. code length<br>(Default : 7FH)      | <br>Ref: Appendix (00-7FH) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.10 Industrial 2 of 5



Start configuration



End configuration

| ITEM                                | OPTICON                    |
|-------------------------------------|----------------------------|
| Read                                |                            |
|                                     | * Disable                  |
|                                     |                            |
| Code ID setting<br>(Default : 0)    | <br>Ref: Appendix (20-7EH) |
| Min. code length<br>(Default : 00)  | <br>Ref: Appendix (00-32H) |
| Max. code length<br>(Default : 32H) | <br>Ref: Appendix (00-32H) |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-32H) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-32H) |
| Check-sum verification                   | <br><b>* Disable</b>       |
|  | <br><b>Enable</b>          |
| Check-sum transmission                   | <br><b>Disable</b>         |
|  | <br><b>* Enable</b>        |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.11 Matrix 2 of 5



Start configuration



End configuration

| ITEM                             | OPTION |
|----------------------------------|--------|
| Read                             |        |
|                                  |        |
| Code ID setting<br>(Default : P) |        |
| Check-sum verification           |        |
|                                  |        |



Start configuration



End configuration

| ITEM                                     | OPTION                         |
|--|--------------------------------|
|  |                                |
| Check-sum transmission                   | <p>Disable</p> <p>* Enable</p> |
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-50H)     |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-50H)     |
| Min. code length<br>(Default : 0B)       | <br>Ref: Appendix (00-50H)     |
| Max. code length<br>(Default : 50H)      | <br>Ref: Appendix (00-50H)     |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H)     |

### 3.12 CHINA POSTAL CODE



Start configuration



End configuration

| ITEM                             | OPTION                 |
|----------------------------------|------------------------|
| Read                             | * Disable              |
|                                  | Enable                 |
| Code ID setting<br>(Default : Q) | Ref: Appendix (20-7EH) |
| Check-sum verification           | * Disable              |
|                                  | Enable                 |
| Check-sum transmission           | Disable                |
|                                  | * Enable               |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-50H) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-50H) |
| Min.code length<br>(Default : 00)        | <br>Ref: Appendix (00-50H) |
| Max.code length<br>(Default : 50H)       | <br>Ref: Appendix (00-50H) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.13 MSI/Plessey



Start configuration



End configuration

| ITEM                             | OPTION                     |
|----------------------------------|----------------------------|
| Read                             |                            |
|                                  |                            |
| Code ID setting<br>(Default : R) | <br>Ref: Appendix (20-7EH) |
| Check-sum verification           | <br><br><br><br><br><br>   |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
|  |                            |
| Check-sum transmission                   | Disable                    |
|  |                            |
| * Enable                                 |                            |
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-3CH) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-3CH) |
| Min. code length<br>(Default : 00)       | <br>Ref: Appendix (00-3CH) |
| Max. code length<br>(Default : 3CH)      | <br>Ref: Appendix (00-3CH) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.14 CODE 32 (Italian Pharma-Code)



Start configuration



End configuration

| ITEM                           | OPTION                 |
|--------------------------------|------------------------|
| Read                           | * Disable              |
|                                | Enable                 |
| Code ID Setting<br>(Default:S) | Ref: Appendix (20-7EH) |
| Check-sum verification         | Disable                |
|                                | * Enable               |
| Check-sum transmission         | Disable                |
|                                | * Enable               |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-0AH) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-0AH) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.15 CODE 11



Start configuration



End configuration

| ITEM                           | OPTION                 |
|--------------------------------|------------------------|
| Read                           | * Disable              |
|                                | Enable                 |
| Code ID setting<br>(Default:T) | Ref: Appendix (20-7EH) |
| Check-sum verification         | Disable                |
|                                | * Enable               |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
|  |                            |
| Check-sum transmission                   | * Disable                  |
|  |                            |
| Enable                                   |                            |
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-50H) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-50H) |
| Min. code length<br>(Default : 00)       | <br>Ref: Appendix (00-50H) |
| Max. code length<br>(Default : 50H)      | <br>Ref: Appendix (00-50H) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.16 Telepen



Start configuration



End configuration

| ITEM                           | OPTION                 |
|--------------------------------|------------------------|
| Read                           | * Disable              |
|                                | Enable                 |
| Code ID setting<br>(Default:V) | Ref: Appendix (20-7EH) |
| Check-sum verification         | Disable                |
|                                | * Enable               |
| Data Format                    | Only Numnic            |
|                                | * Full ASCII           |



Start configuration



End configuration

| ITEM                                     | OPTION                     |
|--|----------------------------|
| Check-sum transmission                   | <br>* Disable              |
|  | <br>Enable                 |
| Truncate Leading<br>(Default : 00)       | <br>Ref: Appendix (00-40H) |
| Truncate Ending<br>(Default : 00)        | <br>Ref: Appendix (00-40H) |
| Min. code length<br>(Default : 00)       | <br>Ref: Appendix (00-40H) |
| Max. code length<br>(Default : 40H)      | <br>Ref: Appendix (00-40H) |
| Insert group selection<br>(Default : 00) | <br>Ref: Appendix (00-02H) |

### 3.17 GS1 Data Bar (RSS)



Start configuration



End configuration

---

ITEM

---

OPTION

---



Enable

---

RSS-14



\*Disable

---



Enable

---

RSS-14 LIMITED



\*Disable

---



Enable

---

RSS-14 EXPANDED



\*Disable

---



Enable

---

RSS TO UPC/EAN



\*Disable

---

### 3.18 Function Key Emulation



Start configuration



End configuration

| ITEM           | OPTION             |
|----------------|--------------------|
| Function Key   | * Disable          |
|                | Enable             |
| Code 39 format | Full ASCII Code 39 |

To scan a function key barcode label, Full ASCII Code 39 must be enabling.

Please refer to Full ASCII Code 39 Table to produce the function key barcode label.

#### Function Code

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |

|   |  |
|---|--|
|     |     |
| PAGE UP(\$E)  | F5(\$U)  |
|    |    |
| PAGE DOWN(\$F)  | F6(\$V)  |
|    |    |
| BS(\$H)   | F7(\$W)  |
|    |    |
| TAB(\$I)  | F8(\$X)  |
|    |    |
| HOME(\$K)   | F9(\$Y)  |
|   |   |
| END(\$L)  | F10(\$Z)   |
|  |  |
| ENTER(\$M)  | ESC(%A)  |
|  |  |
| INSERT(\$N)   | F11(%B)  |
|  |  |
| DELETE(\$O)   | F12(%C)  |

## **Appendix A –**

| Dec | Hex | Char. | Dec | Hex | Char. |
|-----|-----|-------|-----|-----|-------|
| 0   | 00  | NUL   | 32  | 20  | SP    |
| 1   | 01  | SOH   | 33  | 21  | !     |
| 2   | 02  | STX   | 34  | 22  | "     |
| 3   | 03  | ETX   | 35  | 23  | #     |
| 4   | 04  | EOT   | 36  | 24  | \$    |
| 5   | 05  | ENQ   | 37  | 25  | %     |
| 6   | 06  | ACK   | 38  | 26  | &     |
| 7   | 07  | BEL   | 39  | 27  | '     |
| 8   | 08  | BS    | 40  | 28  | (     |
| 9   | 09  | HT    | 41  | 29  | )     |
| 10  | 0A  | LF    | 42  | 2A  | *     |
| 11  | 0B  | VT    | 43  | 2B  | +     |
| 12  | 0C  | FF    | 44  | 2C  | ,     |
| 13  | 0D  | CR    | 45  | 2D  | -     |
| 14  | 0E  | SO    | 46  | 2E  | .     |
| 15  | 0F  | SI    | 47  | 2F  | /     |
| 16  | 10  | DLE   | 48  | 30  | 0     |
| 17  | 11  | DC1   | 49  | 31  | 1     |
| 18  | 12  | DC2   | 50  | 32  | 2     |
| 19  | 13  | DC3   | 51  | 33  | 3     |
| 20  | 14  | DC4   | 52  | 34  | 4     |
| 21  | 15  | NAK   | 53  | 35  | 5     |
| 22  | 16  | SYN   | 54  | 36  | 6     |
| 23  | 17  | ETB   | 55  | 37  | 7     |
| 24  | 18  | CAN   | 56  | 38  | 8     |
| 25  | 19  | EM    | 57  | 39  | 9     |
| 26  | 1A  | SUB   | 58  | 3A  | :     |
| 27  | 1B  | ESC   | 59  | 3B  | ;     |
| 28  | 1C  | FS    | 60  | 3C  | <     |
| 29  | 1D  | GS    | 61  | 3D  | =     |
| 30  | 1E  | RS    | 62  | 3E  | >     |
| 31  | 1F  | US    | 63  | 3F  | ?     |

| Dec | Hex | Char. | Dec | Hex | Char. |
|-----|-----|-------|-----|-----|-------|
| 64  | 40  | @     | 96  | 60  | '     |
| 65  | 41  | A     | 97  | 61  | a     |
| 66  | 42  | B     | 98  | 62  | b     |
| 67  | 43  | C     | 99  | 63  | c     |
| 68  | 44  | D     | 100 | 64  | d     |
| 69  | 45  | E     | 101 | 65  | e     |
| 70  | 46  | F     | 102 | 66  | f     |
| 71  | 47  | G     | 103 | 67  | G     |
| 72  | 48  | H     | 104 | 68  | h     |
| 73  | 49  | I     | 105 | 69  | i     |
| 74  | 4A  | J     | 106 | 6A  | j     |
| 75  | 4B  | K     | 107 | 6B  | k     |
| 76  | 4C  | L     | 108 | 6C  | l     |
| 77  | 4D  | M     | 109 | 6D  | m     |
| 78  | 4E  | N     | 110 | 6E  | n     |
| 79  | 4F  | O     | 111 | 6F  | o     |
| 80  | 50  | P     | 112 | 70  | p     |
| 81  | 51  | Q     | 113 | 71  | q     |
| 82  | 52  | R     | 114 | 72  | r     |
| 83  | 53  | S     | 115 | 73  | s     |
| 84  | 54  | T     | 116 | 74  | t     |
| 85  | 55  | U     | 117 | 75  | u     |
| 86  | 56  | V     | 118 | 76  | v     |
| 87  | 57  | W     | 119 | 77  | w     |
| 88  | 58  | X     | 120 | 78  | x     |
| 89  | 59  | Y     | 121 | 79  | y     |
| 90  | 5A  | Z     | 122 | 7A  | z     |
| 91  | 5B  | [     | 123 | 7B  | {     |
| 92  | 5C  | \     | 124 | 7C  |       |
| 93  | 5D  | }     | 125 | 7D  | }     |
| 94  | 5E  | ^     | 126 | 7E  | ~     |
| 95  | 5F  | -     | 127 | 7F  | DEL   |

## Table-Hex HEXADCIMAL



1



A



2



B



3



C



4



D



5



E



6



F



7



8



Confirm configuration



9



End Configuration



0

## Function Key Table

|   | 0         | 1   |
|---|-----------|-----|
| 0 | NULL      |     |
| 1 | UP        | F1  |
| 2 | DOWN      | F2  |
| 3 | LEFT      | F3  |
| 4 | RIGHT     | F4  |
| 5 | PAGE UP   | F5  |
| 6 | PAGE DOWN | F6  |
| 7 |           | F7  |
| 8 | BS        | F8  |
| 9 | TAB       | F9  |
| A |           | F10 |
| B | HOME      | ESC |
| C | END       | F11 |
| D | ENTER     | F12 |
| E | INSERT    |     |
| F | DELETE    |     |

**POSX**



**DEFAULT**



**CHECK VERSION**

Version: 3.1