

# **Ez One Shot<sup>®</sup>**

## **2D FIXED MOUNT SCANNER USER'S MANUAL**



Version: 2019.1A  
Model: MT6225

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# CLONING MODE

## WHAT IS CLONING MODE?

CLONING duplicates a scanner's settings in other scanners. It can save time when a number of scanners must be programmed to the same settings.

## HOW SHOULD CLONING WORK?

1. Using this guide, make all the necessary settings for one wand.
2. Scan the CLONING MODE bar code shown below.
3. When CLONING MODE is scanned, all setup parameters will be converted to alphanumeric characters and shown on the monitor.
4. Using a bar code printer, print out all the setup parameters as Code 39 bar code labels.
5. Scan the printed labels sequentially with each wand to be programmed.



## NOTES:

1. All cloning strings are upper case.
2. All cloning strings printed on labels should be the same as those on the monitor sequentially from first to last.
3. Cloning mode works in Word Note Pad only.
4. Never edit the data on the first row (.A017\$). It is an entry command for cloning.
5. The cloning string's length can be adjusted by combining multiple strings into one, or by breaking one string into multiple strings starting from the second row after "...". Length must be in sequences of four, such as 4, 8, 12, 16, 20 (MAX).
6. Be sure to print the dots exactly where they are shown on the monitor.

## FORMAT OF CLONING

\* Format of Cloning:

1st row >>> ".A017\$" ( never edit any data of the first row )

2nd row >>> "...XXXX" you can adjust the String's Length starting from the dots "...". The length of the string should be in 4, 8, 12, 16 or 20 ( MAX )digits.

3rd row ~ so on >>> XXXX

End row - A dot "." Is the ending of cloning.

XXXX Stands for any string

# CLONING MODE

## EXAMPLE :

### 1. PROJECT ASSIGNMENTS:

- 1.1. Beep tone: **BEEP LOW**
- 1.2. Capslock Mode: **CAPSLOCK ON**
- 1.3. Reading Mode: **CONTINUOUS MODE**

### 2. SETTING PROCEDURE:

- 2.1. Scan **BEEP LOW (GROUP 5)**.
- 2.2. Scan **CAPSLOCK ON (GROUP 14)**.
- 2.3. Scan **CONTINUOUS MODE (GROUP2)**.

3. Scan [A016\$] Cloning Mode. All parameters will be output in alphanumeric characters and shown on the monitor.



4. Print the results shown on the monitor as bar codes with a bar code printer. The bar codes should be in the Code 39 symbology.



5. Scan from the first row to the second and so on sequentially, top to bottom, with the scanner you wish to "clone" these settings to.

## CORRECT SETTING

|         |         |
|---------|---------|
| .A017\$ |         |
| ....    | 4       |
| 0604    | 4       |
| 5A02    | 4       |
| 5F04    | 4       |
| .       | 4 (Dot) |

|              |          |
|--------------|----------|
| .A017\$      |          |
| ....06045A02 | 12       |
| 5F04.        | 4+.(Dot) |

## WRONG SETTING

|         |   |
|---------|---|
| .A017\$ |   |
| ..      | ← |
| ..0604  |   |
| 5A02    |   |
| 5F04    |   |
| .       |   |

**Wrong Setting:** The string "..." consists of 4 Dots, located at the beginning of second row; do not break the "...." into multiple strings.

|           |           |
|-----------|-----------|
| .A017\$   | ✓         |
| ....06045 | 9 x } ←   |
| A025F04   | 7 x } ←   |
| .         | 4 (Dot) ✓ |

**Wrong Setting:** The string lengths of the second and third row do not match the length requirements, because rows should be in length of four digits.

|             |            |
|-------------|------------|
| .A017\$.... | X ←        |
| 0604        | 4 ✓        |
| 5A02        | 4 ✓        |
| 5F04.       | 4+.(Dot) ✓ |

**Wrong Setting because you add "...." after .A017\$:**  
The .A017\$ is a FIXED parameter to enter setup procedure. It is an unchangeable parameter. **Never add, delete or rearrange data from the FIRST row.**

# HOW TO SET PARAMETERS

## How do you program a scanner with this user's guide?

1. Use the scanner to scan at the bar code representing the function/parameter you want to set.
2. When you hear two beeps, the new settings have been defined or updated permanently to the scanner.

Default parameters are indicated in bold type and underlined characters. The character font is **ARIAL BLACK**. CD = Check Digit. CDV = Check Digit Verification.

Most settings require only a single bar code, but a few need several different bar codes to be scanned in order to completely define a setting (i.e Multi-step Configurations). They are:

### **Preamble / Postamble (maximum 16 digits)**

Step 1: Scan CLR PRE/POSTAMBLE.

Step 2: Scan PREAMBLE or POSTAMBLE.

Step 3: Scan 1 ~ 16 alphanumeric from Full ASCII table (Group 36-47).

Step 4: Scan PREAMBLE or POSTAMBLE.

### **Min Length / Max Length**

Step 1: Scan MIN LENGTH or MAX LENGTH.

Step 2: Scan two digits from Full ASCII table - Numbers (Group 44).

Step 3: Scan MIN LENGTH or MAX LENGTH.

### **Set Code ID (Example: Code 39)**

Step 1: Scan CODE 39 SET ID from Group 9

Step 2: Scan either one or two alphanumerics (maximum 2 digits) from Full ASCII table (Group 38-44)

Step 3: Scan CODE 39 SET ID from Group 9

## **NOTES:**

1. The scanner will beep three times as indication that a setting is not yet complete or unexpected barcode is scanned during multi-step configuration.
2. If you make a mistake, forget a step, etc., and want to abort the multi-step configuration, scan RESET/ABORT and start over again.

**RESET/ ABORT**



# GROUP-1

## GENERAL SETTINGS

---

### DEFAULT

.A001\$



\* Reset to factory default

---

### CHECK VERSION

.A007\$



\* Check firmware version

---

### RESET/ ABORT

.P023\$



\* Abort multi-step configuration

---

### INTERFACE

.C008\$



**USB HID**

.C006\$



USB VCP

\* Caution: Before switching to USB VCP, please make sure you have installed proper driver on PC. The driver is available for download on website or from your local distributor.

---

### SETUP CODE READ

.B015\$



**SETUP CODE ON**

.B016\$



SETUP CODE OFF

\* Caution: Scanning SETUP CODE OFF will turn the scanner into unprogrammable state and the scanner will not react to any configuration barcode!

---

### FUNCTION CODE CONVERSION

.C019\$



**ENABLE**

.C020\$



DISABLE

\* Caution: Once disabled, the scanner will output the original encoded data of the barcodes in Full ASCII Table - Function/Navigation/Modifier Keys (Group 45-47).

# GROUP-2

## READING MODE

---

. F005\$



CONTINUOUS MODE

- \* LED is always on.
- \* The trigger does not function in Continuous Mode.

. F007\$



AUTO SENSING MODE (IMAGER)

- \* Auto-Sensing Mode (Imager) uses ambient light to detect barcodes. The LED dims until a barcode is presented to the scanner, then the LED brightens to read the barcode.
- \* If the ambient light condition is poor, the scanner might not be working properly.

. F010\$



**AUTO SENSING MODE (INFRARED)**

- \* Auto-Sensing Mode (Infrared) uses Infrared Sensor to detect objects. The LED brightens when an object is detected.
- \* The LED turns off if no object is detected after LED Auto-off Timeout expires.

. F061\$



SERIAL TRIGGER MODE

- \* CAUTION !! Do NOT scan this configuration barcode while in USB HID interface !! Make sure your scanner is RS232 interface or switch to USB VCP interface.
- \* The LED will turn on after receiving serial command "{G}", or <0x7B><0x47><0x7D> by default.
- \* The LED will turn off after one barcode is read or after receiving serial command "{S}", or <0x7B><0x53><0x7D> by default.

---

. F056\$



NEAR

. F057\$



**MIDDLE**

**AUTO-SENSING (INFRARED) RANGE**

. F058\$



FAR

### NOTE:

1. Near - Max. 13cm Auto-sensing Range
2. Middle - Max. 20cm Auto-sensing Range
3. Far - Max. 27cm Auto-sensing Range

# GROUP-3

## ADVANCED READING MODE SETTINGS

---

### SCAN INTERVAL (CONTINUOUS, AUTO- SENSING MODE(IMAGER))

. F029\$



SCAN INTERVAL  
(DEFAULT = 1.0 SEC)

#### NOTE:

1. Scan Interval is the timeout between two consecutive scans.

#### STEPS:

1. Scan SCAN INTERVAL
  2. Scan 3 digits (000~255) from Full ASCII table - Numbers (Group 44)  
(000=0 Sec, 001=0.1 Sec, 002=0.2 Sec, 003=0.3 Sec, 004=0.4 Sec  
005=0.5 Sec, 006=1.0 Sec, 007=1.5 Sec, ....., 255=125 Sec  
Default = 006 (1 Sec))
  3. Scan SCAN INTERVAL
- 

### LED AUTO-OFF TIMEOUT (ALL READING MODES)

. F043\$



LED AUTO OFF TIMEOUT  
(DEFAULT = 0 SEC)

#### STEPS:

1. Scan LED AUTO-OFF TIMEOUT
  2. Scan 3 digits (000~255) from Full ASCII table - Numbers (Group 44)  
(000=0 Sec, 001=0.1 Sec, 002=0.2 Sec, 003=0.3 Sec, 004=0.4 Sec  
005=0.5 Sec, 006=1.0 Sec, 007=1.5 Sec, ....., 255=125 Sec  
Default = 000 (0 Sec, or Continuous))
  3. Scan LED AUTO-OFF TIMEOUT
- 

### IDENTICAL READ INTERVAL (CONTINUOUS, AUTO- SENSING MODE(IMAGER))

. F040\$



IDENTICAL READ INTERVAL  
(DEFAULT = 1.0 SEC)

#### NOTE:

1. Identical Read Interval is the timeout between two consecutive scans on the same barcode. The interval starts counting after the barcode is removed.

#### STEPS:

1. Scan IDENTICAL READ INTERVAL
2. Scan 3 digits (000~255) from Full ASCII table - Numbers (Group 44)  
(000=0 Sec, 001=0.1 Sec, 002=0.2 Sec, 003=0.3 Sec, 004=0.4 Sec  
005=0.5 Sec, 006=1.0 Sec, 007=1.5 Sec, ....., 255=125 Sec  
Default = 006 (1 Sec))
3. Scan IDENTICAL READ INTERVAL



# GROUP-4

## ADVANCED READING MODE SETTINGS

---

### NO READ STATUS (ALL READING MODE)

. D040\$



**NO READ STATUS DISABLE**

. D041\$



NO READ STATUS ENABLE

#### NOTE:

1. When enabled, a "No Read" message will be sent after LED Auto-Off Timeout expires.
  2. For Trigger Mode and Toggle Mode, LED Auto-Off Control must also be enabled for No Read Status to be functional.
- 

### NO READ MESSAGE (ALL READING MODES)

. D042\$



NO READ MESSAGE  
(DEFAULT = "No Read")

#### NOTE:

1. No Read Status must also be enabled for No Read Message to be functional.

#### STEPS:

1. Scan NO READ MESSAGE
  2. Scan 1~10 alphanumeric from Full ASCII table - Numbers (Group 44)
  3. Scan NO READ MESSAGE
- 

### IMAGER SENSITIVITY (AUTO-SENSING MODE (IMAGER))

. F011\$



IMAGER SENSITIVITY  
(DEFAULT = 5)

#### NOTE:

1. The less the value, the more sensitive the scanner becomes.

#### STEPS:

1. Scan IMAGER SENSITIVITY
  2. Scan 2 digits (01~20) from Full ASCII table - Numbers (Group 44)
  3. Scan IMAGER SENSITIVITY
- 

### MOBILE PHONE MODE (ALL READING MODES)

. A034\$



**DISABLE**

. A035\$



ENABLE

#### NOTE:

1. When enabled, the scanner is optimized for mobile display scanning.

# GROUP-5

## BEEP TONE, BEEP MODE, TERMINATOR

---

### BEEP TONE

.F019\$



BEEP HIGH

.F018\$



**BEEP MEDIUM**

.F022\$



BEEP LOW

.F012\$



BEEP OFF

---

### BEEP MODE

.F023\$



**NORMAL**

.F024\$



WARNING BEEP ONLY

.F025\$



MUTE

---

### TERMINATOR

.D010\$



NONE

.D013\$



**CR+LF**

.D011\$



LF

.D014\$



TAB

.D012\$



**CR**

.D015\$



SPACE

.D016\$



ESC

### NOTE:

Below is the position of Terminator among output data string:

[Preamble] [Symbology ID] [Barcode Length] [Barcode Data] [Postamble] [**Terminator**]

By default, with Preamble, Postamble, Barcode Length and Symbology ID disabled, the scanner data output will be:

[Barcode Data] [**Terminator**]

1. For the USB HID interface the default terminator is CR.
2. For the USB VCP/RS232 interface the default terminator is CR+LF.

# GROUP-6

## SEND DATA LENGTH, PREAMBLE & POSTAMBLE

---

### SEND DATA LENGTH

.D019\$



SEND DATA LENGTH ON

.D020\$



**SEND DATA LENGTH OFF**

---

### PREAMBLE & POSTAMBLE ( PREFIX AND SUFFIX )

.A011\$



CLEAR PRE/ POSTAMBLE

.A012\$



PREAMBLE (16)

.A013\$



POSTAMBLE (16)

### EXAMPLE:

Set PREAMBLE String as “##”

POSTAMBLE String as “\$\$”

### SETTING PROCEDURE:

STEP 1 : Scan : CLEAR PRE/ POSTAMBLE.

STEP 2 : Scan : PREAMBLE.

STEP 3 : Scan : “#” twice from Full ASCII Table.

STEP 4 : Scan : PREAMBLE.

STEP 5 : Scan : POSTAMBLE.

STEP 6 : Scan : “\$” twice from Full ASCII Table.

STEP 7 : Scan : POSTAMBLE.

### DATA FORMAT:

*[Preamble] [Symbology ID] [Barcode Length] [Barcode Data] [Postamble] [Terminator]*

### NOTES:

1. A PREAMBLE is a string of up to 16 characters added to the beginning of a scanned barcode.
2. A POSTAMBLE is a string of up to 16 characters added to the end of a scanned barcode.
3. Default value for both: None.

# GROUP-7

## CODE ID, INVERSE BARCODE

---

### INVERSE BARCODE

.D022\$



ENABLE 1D INVERSE  
BARCODE

.D021\$



**DISABLE 1D INVERSE  
BARCODE**

.D055\$



ENABLE 2D INVERSE  
BARCODE

.D054\$



**DISABLE 2D INVERSE  
BARCODE**

---

### CODE ID / SYBBOLOGY ID

.A008\$



FACTORY ID ON

.A014\$



AIM ID ON

.A015\$



SET ID ON

.A009\$



**DISABLE CODE ID**

---

### NOTES:

1. Only ONE code ID will be sent.
2. The code ID is located at the position before the barcode data and after the preamble.

### DATA FORMAT:

[Preamble] [Symbology ID] [Barcode Length] [Barcode Data] [Postamble] [Terminator]


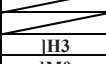
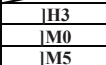
### EXAMPLE :

- 1.Preamble 145287,
- 2.Code ID: enable AIM ID,
- 3.Bar code symbologies : EAN 13+5

|                                      |                         |                             |       |
|--------------------------------------|-------------------------|-----------------------------|-------|
| 145287                               | ]E0                     | 4563987123453               | 12411 |
| Preamble<br>145287                   | CODE ID<br>AIM ID : ]E0 | BARCODE / DATA<br>EAN 13 +5 |       |
| OUTPUT : 145287]E0456398712345312411 |                         |                             |       |

# GROUP-8

## SYMBOLOGIES CODE IDENTIFIER

| Symbologies                     |                    | Factory ID           | AIM ID |   |
|---------------------------------|--------------------|----------------------|--------|---|
| 1D                              | Code 39            | Disable CDV          | A0     |   |
|                                 |                    | CDV & Send CD        | A1     |   |
|                                 |                    | CDV                  | A3     |   |
|                                 | Full ASCII Code 39 | Disable CDV          | D      | A4  |
|                                 |                    | CDV & Send CD        |        | A5  |
|                                 |                    | CDV                  |        | A7  |
|                                 | Code 32            |                      | B      | X0  |
|                                 | Codabar            |                      | N      | F0  |
|                                 |                    | CDV & Send CD        |        | F2  |
|                                 |                    | CDV                  |        | F6  |
|                                 |                    | Symbol Concatenation |        | F1  |
|                                 | Interleaved 2 of 5 | Disable CDV          | I      | I0  |
|                                 |                    | CDV & Send CD        |        | I1  |
|                                 |                    | CDV                  |        | I3  |
|                                 | NEC 2 of 5         |                      | n      | X0  |
|                                 | IATA 2 of 5        |                      | R      | R0  |
|                                 | Matrix 2 of 5      |                      | Y      | X0  |
|                                 | Industrial 2 of 5  |                      | V      | S0  |
|                                 | Code 11            | Disable CDV          | J      |  |
|                                 |                    | CDV & Send CD-1      |        |  |
|                                 |                    | CDV & Send CD-2      |        |  |
|                                 |                    | CDV                  |        | H3  |
|                                 | MSI                | Disable CDV          | O      | M0  |
|                                 |                    | Single Mod 10        |        | M5  |
|                                 |                    | Single Mod 10 & CD   |        | M1  |
|                                 |                    | Double Mod 10        |        | M7  |
|                                 |                    | Double Mod 10 & CD   |        | M3  |
|                                 |                    | MOD - 11             |        | M6  |
|                                 |                    | MOD - 11 & Send CD   |        | M2  |
|                                 | EAN-13             |                      | F      | E0  |
| with Add-On                     |                    | E3                   |        |   |
| UPC-A                           |                    | A                    | E0     |   |
|                                 | with Add-On        |                      | E3     |   |
| EAN-8                           |                    | S                    | E4     |   |
|                                 | with Add-On        |                      | E4     |   |
| UPC-E                           |                    | E                    | E0     |   |
|                                 | with Add-On        |                      | E3     |   |
| Code 93                         |                    | L                    | G0     |   |
| Code 128                        |                    | K                    | C0     |   |
| GS1 128                         |                    | T                    | C1     |   |
| GS1 Databar                     |                    | G                    | e0     |   |
| Databar Limited                 |                    | l                    | e0     |   |
| Databar Expanded                |                    | e                    | e0     |   |
| Postal                          | China Post         | H                    | X0     |   |
|                                 | Korea Post         | k                    | X0     |   |
|                                 | Australian         | a                    | X0     |   |
|                                 | British            | b                    | X0     |   |
|                                 | Canadian           | c                    | X0     |   |
|                                 | Japanese           | j                    | X0     |   |
|                                 | KIX (Netherlands)  | x                    | X0     |   |
|                                 | InfoMail Code      | m                    | X0     |   |
|                                 | Intelligent Code   | i                    | X0     |   |
|                                 | Planet Code        | f                    | X0     |   |
|                                 | Postal-4i Code     | 4                    | X0     |   |
|                                 | Postnet Code       | p                    | X0     |   |
| 2D                              | PDF417             | Z                    | L0     |   |
|                                 | Micro-PDF          | r                    | L0     |   |
|                                 | QR Code            | W                    | Q0     |   |
|                                 | Data Matrix        | X                    | d0     |   |
|                                 | MaxiCode           | u                    | U0     |   |
|                                 | Codablock-A        | g                    | O6     |   |
|                                 | Codablock-F        | C                    | O0     |   |
|                                 | Aztec              | z                    | z0     |   |
| Chinese Sensible Code (Han Xin) | O                  | X0                   |        |   |

# GROUP-9

## SET CODE ID

---

. P001\$



EAN-13 Set ID

. P002\$



EAN-8 Set ID

. P003\$



UPC-E Set ID

. P004\$



UPC-A Set ID

. P005\$



Code 39 Set ID

. P013\$



Code 93 Set ID

. P007\$



Codabar Set ID

. P021\$



IATA Set ID

. P010\$



Code 128 Set ID

. P016\$



GS1 128 Set ID

. P009\$



Code 11 Set ID

. P011\$



Code 32 Set ID

. P014\$



MSI Set ID

. P017\$



Matrix 2 of 5 Set ID

. P006\$



Interleaved 2 of 5  
Set ID

# GROUP-10

## SET CODE ID

---

. P018\$



Industrial 2 of 5 Set ID

. P028\$



NEC 2 of 5 Set ID

. P008\$



Full ASCII Code39  
Set ID

. P024\$



GS1 Databar  
Set ID

. P019\$



GS1 Databar Limited  
Set ID

. P020\$



GS1 Databar Expanded  
Set ID

. P012\$



China Post (TOSHIBA Code)  
Set ID

. P035\$



Korea Post Set ID

. P036\$



Australian Post Set ID

. P037\$



British Post Set ID

. P038\$



Canadian Post Set ID

. P039\$



Japanese Post Set ID

. P040\$



KIX (Netherlands) Post  
Set ID

. P041\$



InfoMail Set ID

# GROUP-11

## SET CODE ID

---

. P042\$



Intelligent Mail Set ID

. P043\$



Planet Code Set ID

. P044\$



Postal-4i Set ID

. P045\$



Postnet Set ID

. P025\$



PDF417 Set ID

. P029\$



MicroPDF417 Set ID

. P026\$



QR Code Set ID

. P027\$



Data Matrix Set ID

. P030\$



MaxiCode Set ID

. P033\$



Aztec Set ID

. P034\$



Chinese Sensible Code (Han Xin)  
Set ID

. P031\$



Codablock A  
Set ID

. P032\$



Codablock F  
Set ID

---

Steps:

1. Scan the SET ID barcode for a particular symbology.
2. Scan one or two alphanumeric characters from the Full ASCII Table.
3. Scan the SET ID barcode again.










# GROUP-12

## INTERBLOCK DELAY, INTERCHARACTER DELAY

---

### INTERBLOCK DELAY

|  |                      |
|--|----------------------|
| . B001\$<br>  | <b><u>0mS</u></b>    |
| . B002\$<br>  | 10mS                 |
| . B003\$<br>  | 50mS                 |
| . B004\$<br>  | 100mS                |
| . B005\$<br>  | 200mS                |
| . B006\$<br>  | 500mS                |
| . B007\$<br> | Set Interblock Delay |

#### NOTES:

You may either scan [0mS], [10mS], [50mS], [100mS], [200mS], [500mS] or follow below steps to fine-tune Interblock Delay (0~2550mS)

1. Scan [Set Interblock Delay].
  2. Scan three digits (Range: 000~255, unit: 10mS) from the Full ASCII Table.
  3. Scan [Set Interblock Delay].
- 

### INTERCHARACTER DELAY

|   |                          |
|---|--------------------------|
| . B010\$<br> | <b><u>0mS</u></b>        |
| . B012\$<br> | 1mS                      |
| . B013\$<br> | 4mS                      |
| . B014\$<br> | 16mS                     |
| . B009\$<br> | Set Intercharacter Delay |

#### NOTES:

You may either scan [0mS], [1mS], [4mS], [16mS] or follow below steps to fine-tune Intercharacter Delay (0~255mS)

1. Scan [Set Intercharacter Delay].
2. Scan three digits (Range: 000~255, unit: 1mS) from the Full ASCII Table.
3. Scan [Set Intercharacter Delay].

# GROUP-13

## KEYBOARD LAYOUT

---

### KEYBOARD LAYOUT

. C010\$



**ENGLISH (USA)**

. C018\$



ENGLISH (UK)

. C012\$



FRENCH

. C011\$



GERMAN

. C014\$



ITALIAN

. C013\$



SPANISH

. C017\$



CZECH (QWERTY)

. C022\$



CZECH (QWERTZ)

. C021\$



HUNGARIAN (QWERTZ)

. C024\$



HUNGARIAN (101 KEY)

. C016\$



SWISS (GERMAN)

. C023\$



SWISS (FRENCH)

. C009\$



JAPAN (106 key)

. C025\$



CANADIAN (FRENCH)

. C034\$



CANADIAN (TRADITIONAL)

. C029\$



NORWEGIAN

. C026\$



SWEDISH

. C031\$



PORTUGUESE

. C030\$



BELGIAN (AZERTY)

. C028\$



DUTCH

. C027\$



DANISH

. C032\$



SLOVAK

. C033\$



BRAZILIAN (PORTUGUESE)

. C015\$



ALT CODE

# GROUP-14

## CAPLOCK MODE, NUMERIC KEY, HT/CR/ESC CONVERSION

### CAPITAL LOCK MODE

. A004\$



CAPLOCK ON

. A005\$



CAPLOCK OFF

. A006\$



CAPLOCK FREE

### NOTE:

1. When barcode scanner is set to Caplock Free mode, no matter keyboard Capslock LED indicator is ON or OFF, output will be always the same as the Original barcode. In other words, what you see is what output is.(CODABAR is the exception)
2. If ABCD/ ABCD, abcd/ abcd, ABCD/T\*E, abcd/tn\*e are on, they work independently according to their rules.

---

### NUMERIC KEY

. D017\$



NUMERIC KEY

. D018\$



ALPHANUMERIC KEY

### NOTE:

1. By default, the alphanumeric key is used for transmitting digits. Scan NUMERIC KEY if you want to use the keys on the numeric keypad.
2. If you select NUMERIC KEY, the Num Lock status of the physical keyboard should be ON.

---

### HT/CR/ESC CONVERTS TO TAB/ENTER/ESCAPE

. D025\$



HT/CR/ESC CONVERTS TO  
TAB/ENTER/ESCAPE ENABLE

. D026\$



HT/CR/ESC CONVERTS TO  
TAB/ENTER/ESCAPE DISABLE

### NOTE:

1. By default, HT [\$!], CR [\$M] and ESC [%A] is transmitted as <0x09>, <0x0D> and <0x1B> respectively.
2. When enabled, HT [\$!], CR [\$M] and ESC [%A] is transmitted as <TAB>, <ENTER> and <ESCAPE> on keyboard respectively.

# GROUP-15

## UTF-8 to Unicode Conversion

---

### UTF-8 TO UNICODE CONVERSION

. C044\$



**DISABLE**

. C045\$



ENABLE

\*This conversion is not supported when Keyboard Layout is set to Alt Code.

# GROUP-16

## RS232 SETTINGS

---

### BAUD RATE

.E003\$



1200

.E004\$



2400

.E005\$



4800

.E006\$



9600

.E007\$



19200

.E022\$



38400

.E061\$



57600

.E065\$



76800

.E063\$



115200

---

### DATA BITS & PARITY

.E008\$



8 Bits None

.E009\$



8 Bits EVEN

.E010\$



8 Bits ODD

.E011\$



8 Bits MARK

.E012\$



8 Bits SPACE

.E013\$



7 Bits EVEN

.E014\$



7 Bits ODD

.E015\$



7 Bits MARK

.E021\$



7 Bits SPACE

# GROUP-17

## RS232 SETTINGS

---

### STOP BITS

. E016\$



**1 STOP BIT**

. E017\$



2 STOP BITS

---

### HANDSHAKING

. E018\$



**NONE**

. E019\$



RTS enable at Power on

. E020\$



RTS enable with Communication

---

### ACK / NAK

. E023\$



ON

. E024\$



**OFF**

---

### FLOW CONTROL: TIME OUT

. E025\$



**1 Sec**

. E026\$



3 Sec

. E027\$



10 Sec

. E028\$



Unlimited

---

### BCC

. E029\$



RS232 BCC Char On

. E030\$



**RS232 BCC Char Off**

# GROUP-18

## ENABLE/ DISABLE SYMBOLOGIES

---

### ENABLE



ENABLE ALL CODE



CODE 32



INDUSTRIAL 2 OF 5



MATRIX 2 OF 5



INTERLEAVED 2 OF 5



CODE 128



CODABAR



CODE 93



GS1-128



IATA



CODE 11



MSI

### DISABLE



DISABLE ALL CODE



CODE 32



INDUSTRIAL 2 OF 5



MATRIX 2 OF 5



INTERLEAVED 2 OF 5



CODE 128



CODABAR



CODE 93



GS1-128



IATA



CODE 11



MSI

# GROUP-19

## ENABLE/ DISABLE SYBLOGIES

---

### ENABLE



**UPC-A**



**UPC-E**



**EAN-8**



**EAN-13**



**CODE 39**



**FULL ASCII CODE39**



**NEC 2 OF 5**



**GS1-128**



**GS1 Databar  
Omnidirectional**



**GS1 Databar Limited**



**GS1 Databar Expanded**



**CHINA POST**

### DISABLE



UPC-A



UPC-E



EAN-8



EAN-13



CODE 39



FULL ASCII CODE39



NEC 2 OF 5



GS1-128



GS1 Databar  
Omnidirectional



GS1 Databar Limited



GS1 Databar Expanded



**CHINA POST**



# GROUP-20

## ENABLE/ DISABLE SYBLOGIES

---

### ENABLE



KOREA POST



**PDF417**



MICROPDF417



**(MICRO) QR CODE**



**DATA MATRIX**



**MAXICODE**



**AZTEC**



CODABLOCK A



CODABLOCK F



CHINESE SENSIBLE CODE  
(HAN XIN)

### DISABLE



**KOREA POST**



PDF417



**MICROPDF417**



(MICRO) QR CODE



DATA MATRIX



MAXICODE



AZTEC



**CODABLOCK A**



**CODABLOCK F**



**CHINESE SENSIBLE CODE  
(HAN XIN)**

# GROUP-21

## INTERLEAVED 2 OF 5, IATA, MATRIX 2 OF 5

. J001\$



**ENABLE**

. J002\$



DISABLE

. J003\$



**DISABLE CDV**

. J004\$



CDV & SEND CD

### INTERLEAVED 2 OF 5

. J006\$



MIN LENGTH ( 04 )

. J007\$



MAX LENGTH ( 80 )

. J005\$



CDV & NOT SEND CD

. N017\$



ENABLE

. N018\$



**DISABLE**

### IATA

. N022\$



MIN LENGTH ( 04 )

. N023\$



MAX LENGTH ( 80 )

. M010\$



ENABLE

. M011\$



**DISABLE**

### MATRIX 2 OF 5

. M015\$



MIN LENGTH ( 04 )

. M016\$



MAX LENGTH ( 80 )

# GROUP-22

INDUSTRIAL 2 OF 5, NEC 2 OF 5, CODE 11

. N001\$



**ENABLE**

. N002\$



DISABLE

**INDUSTRIAL 2 OF 5**

. N006\$



MIN LENGTH ( 04 )

. N007\$



MAX LENGTH ( 48 )

. J033\$



**ENABLE**

. J034\$



DISABLE

. J035\$



**DISABLE CDV**

. J036\$



CDV & SEND CD

**NEC 2 OF 5**

. J038\$



MIN LENGTH ( 04 )

. J039\$



MAX LENGTH ( 80 )

. J037\$



CDV & NOT SEND CD

. I 010\$



**ENABLE**

. I 011\$



DISABLE

. I 042\$



CDV & SEND CD  
(1 DIGIT)

**CODE 11**

. I 043\$



**CDV & SEND CD  
(2 DIGITS)**

. I 015\$



MIN LENGTH ( 04 )

. I 016\$



MAX LENGTH ( 80 )

# GROUP-23

## CODE 93, MSI

---

### CODE 93

. G010\$



ENABLE

. G011\$



DISABLE

. G012\$



MIN LENGTH ( 01 )

. G013\$



MAX LENGTH ( 80 )

---

. L001\$



ENABLE

. L002\$



DISABLE

. L024\$



DOUBLE MOD 10 &  
NOT SEND CD

. L007\$



DOUBLE MOD 10 &  
SEND CD

. L003\$



DISABLE CDV &  
NOT SEND CD

. L006\$



MAX LENGTH ( 48 )

### MSI

. L004\$



SINGLE MOD 10 &  
NOT SEND CD

. L009\$



SINGLE MOD 10 &  
SEND CD

. L025\$



MOD 11 & NOT SEND CD

. L008\$



MOD 11 & SEND CD

. L005\$



MIN LENGTH ( 04 )

# GROUP-24

## STANDARD/FULL ASCII CODE 39, CODE 32

---



**CODE 39 ENABLE**



CODE 39 DISABLE



**FULL ASCII CODE 39  
ENABLE**



FULL ASCII CODE 39  
DISABLE



**START / STOP - SEND**



START / STOP Not SEND

### STANDARD CODE 39 & FULL ASCII 39



**DISABLE CDV**



CDV & SEND CD



CDV & NOT SEND CD



MIN LENGTH ( 01 )



MAX LENGTH ( 48 )

#### NOTE:

The default for Code 39 is Standard Code 39. If Full ASCII Code 39 is enabled, Standard Code 39 will be automatically disabled.

---



ENABLE

### CODE 32



**DISABLE**

# GROUP-25

## CODABAR

---



**ENABLE**



**DISABLE**



**DISABLE CDV**



**CDV & SEND CD**

## CODABAR



**CDV & NOT SEND CD**



**MIN LENGTH ( 04 )**



**MAX LENGTH ( 60 )**



**NOT SEND START / STOP**

## START / STOP



**Send START / STOP**



**CONCATENATION OFF**

## CONCATENATION



**CONCATENATION ON**



**CONCATENATION  
REQUIRE**

### NOTE:

1. When you enable concatenation, the scanner looks for a Codabar symbol having a "D" start character, adjacent to a symbol having a "D" stop character. In this case the two messages are concatenated into one with the "D" characters omitted.



2. Select Require to prevent the scanner from decoding a single "D" Codabar symbol without its companion. This selection has no effect on Codabar symbols without Stop/Start D characters.

# GROUP-26

CODE 128, GS1-128, GS1 DATABAR

---

## CODE 128

. J010\$



**ENABLE**

. J012\$



MIN LENGTH ( 01 )

. J011\$



DISABLE

. J013\$



MAX LENGTH ( 80 )

. J041\$



**ISBT 128**  
**CONCATENATION**  
**OFF**

. J040\$



ISBT 128  
CONCATENATION  
ON

---

## GS1-128

. M001\$



**ENABLE**

. M019\$



MIN LENGTH ( 01 )

. M002\$



DISABLE

. M020\$



MAX LENGTH ( 80 )

---

## GS1 DATABAR

. N032\$



**GS1 DATABAR**  
**OMNIDIRECTIONAL**  
**ENABLE**

. N033\$



GS1 DATABAR  
OMNIDIRECTIONAL  
DISABLE

. N010\$



**GS1 DATABAR**  
**LIMITED ENABLE**

. N011\$



GS1 DATABAR  
LIMITED DISABLE

. N026\$



**GS1 DATABAR**  
**EXPANDED ENABLE**

. N027\$



GS1 DATABAR  
EXPANDED DISABLE

. N030\$



MIN LENGTH ( 04 )

. N031\$



MAX LENGTH ( 74 )

# GROUP-27

## UPC- A, UPC-A EXPAND TO EAN-13

---

. H001\$



**ENABLE**

**UPC- A**

. H005\$



**CHECK DIGIT SEND**

. H002\$



DISABLE

. H006\$



CHECK DIGIT NOT SEND

. H077\$



**NUMBER SYSTEM  
DIGIT SEND**

. H078\$



NUMBER SYSTEM  
DIGIT NOT SEND

---

## UPC-A EXPAND TO EAN-13

. H068\$



ENABLE

. H067\$



**DISABLE**

. H033\$



+5 ON

**ADD ON SUPPLEMENT**

. H060\$



ADDENDA REQUIRED ON

. H034\$



**+ 5 OFF**

. H059\$



**ADDENDA REQUIRED OFF**

. H035\$



+2 ON

. H036\$



**+ 2 OFF**

. H045\$



**ADD A SPACE ON**

. H046\$



ADD A SPACE OFF

---

### NOTE:

If ADDENDA REQUIRED is set to ON, the scanner will only read an UPC-A/E bar code that has an addenda. At the same time please also scan +5 ON or +2 ON so the scanner will output a 5-digit or 2-digit addendum.



# GROUP-28

## UPC-E, UPC-E EXPAND TO UPC-A, UPC-E1

---

. H007\$



**ENABLE**

. H008\$



DISABLE

. H079\$



**NUMBER SYSTEM  
DIGIT SEND**

**UPC-E**

. H011\$



**CHECK DIGIT SEND**

. H012\$



CHECK DIGIT NOT SEND

. H080\$



NUMBER SYSTEM  
DIGIT NOT SEND

---

**UPC-E EXPAND  
TO UPC-A**

. H053\$



ENABLE

. H054\$



**DISABLE**

. H037\$



+5 ON

. H038\$



**+ 5 OFF**

. H039\$



+2 ON

. H047\$



**ADD A SPACE ON**

**ADD ON SUPPLEMENT**

. H056\$



ADDENDA REQUIRED ON

. H055\$



**ADDENDA REQUIRED OFF**

. H040\$



**+ 2 OFF**

. H048\$



ADD A SPACE OFF

---

**UPC-E1**

. H065\$



UPC-E1 ON

. H066\$



**UPC-E1 OFF**

# GROUP-29

## EAN-8

---

. H019\$



**ENABLE**

**EAN-8**

. H020\$



DISABLE

. H023\$



**CHECK DIGIT SEND**

. H024\$



CHECK DIGIT NOT SEND

---

. H029\$



+ 5 ON

**ADD ON SUPPLEMENT**

. H062\$



ADDENDA REQUIRED ON

. H030\$



**+ 5 OFF**

. H061\$



**ADDENDA REQUIRED OFF**

. H031\$



+ 2 ON

. H032\$



**+ 2 OFF**

. H043\$



**ADD A SPACE ON**

. H044\$



ADD A SPACE OFF

---

### NOTE:

If ADDENDA REQUIRED is set to ON, the scanner will only read an EAN-8 bar code that has an addenda. At the same time please also scan +5 ON or +2 ON so the scanner will output a 5-digit or 2-digit addendum.

# GROUP-30

## EAN-13, ISBN

---



### ADD ON SUPPLEMENT



### NOTES:

1. If ADDENDA REQUIRED is set to ON, the scanner will only read an EAN-13 bar code that has an addenda. At the same time please also scan +5 ON or +2 ON so the scanner will output a 5-digit or 2-digit addendum.
2. ISBN is considered as an extension of EAN-13. EAN-13 must be enabled before reading an ISBN.

# GROUP-31

CHINA POST, KOREA POST, PLANET, POSTNET

---



## CHINA POST



## KOREA POST



## PLANET CODE



## POSTNET



# GROUP-32

## AUSTRALIAN POST, OTHER POSTAL CODES

---



### AUSTRALIAN POST



### AUSTRALIAN POST INTERPRETATION

This option controls what interpretation is applied to customer fields in Australian 4-State symbols. By default, interpretation is Bar Output (Code = 0).

| Code | Interpretation             |
|------|----------------------------|
| 0    | Bar Output                 |
| 1    | Numeric N Table            |
| 2    | Alphanumeric C Table       |
| 3    | Combination C and N Tables |

Example:

To set interpretation to Numeric N Table,

1. Scan [Australian Post Interpretation]
2. Scan [1] from Full ASCII Table - Numbers (Group 44)
3. Scan [Australian Post Interpretation]



### OTHER POSTAL CODES



| Code | Postal Code           | Code | Postal Code   |
|------|-----------------------|------|---|
| 01   | Australian            | 15   | Planet + Intelligent Mail                                     |
| 02   | InfoMail              | 16   | Postnet + Intelligent Mail                                    |
| 03   | Japanese              | 17   | Postal-4i + Intelligent Mail                                  |
| 04   | KIX (Netherlands)     | 18   | Planet + Postnet with B Fields                                |
| 05   | Planet                | 19   | Postal-4i + Postnet with B Fields                             |
| 06   | Postnet               | 20   | Intelligent Mail + Postnet with B Fields                      |
| 07   | British               | 21   | Planet + Postnet + Postal-4i                                  |
| 09   | Postal-4i             | 22   | Planet + Postnet + Intelligent Mail                           |
| 10   | Intelligent Mail      | 23   | Planet + Postal-4i + Intelligent Mail                         |
| 11   | Postnet with B Fields | 24   | Postnet + Postal-4i + Intelligent Mail                        |
| 30   | Canadian              | 25   | Planet + Postal-4i + Postnet with B Fields                    |
| 08   | InfoMail + British    | 26   | Planet + Intelligent Mail + Postnet with B Fields             |
| 12   | Planet + Postnet      | 27   | Postal-4i + Intelligent Mail + Postnet with B Fields          |
| 13   | Planet + Postal-4i    | 28   | Planet + Postnet + Postal-4i + Intelligent Mail               |
| 14   | Postnet + Postal-4i   | 29   | Planet + Postal-4i + Intelligent Mail + Postnet with B Fields |

Example:

To enable Planet + Postal-4i + Intelligent Mail,

1. Scan [Other Postal Codes]
2. Scan [2] and [3] from Full ASCII Table - Numbers (Group 44)
3. Scan [Other Postal Codes]

# GROUP-33

PDF417, MICROPDF417, (MICRO) QR CODE, DATAMATRIX

---

## PDF417

.G021\$



**ENABLE**

.G022\$



DISABLE

.G023\$



MIN LENGTH ( 0001 )

.G024\$



MAX LENGTH ( 2750 )

---

## MICROPDF417

.G039\$



ENABLE

.G040\$



**DISABLE**

.G041\$



MIN LENGTH ( 001 )

.G042\$



MAX LENGTH ( 366 )

---

## (MICRO) QR CODE

.G025\$



**ENABLE**

.G026\$



DISABLE

.G029\$



MIN LENGTH ( 0001 )

.G030\$



MAX LENGTH ( 4000 )

---

## DATAMATRIX

.G031\$



**ENABLE**

.G032\$



DISABLE

.G033\$



MIN LENGTH ( 0001 )

.G034\$



MAX LENGTH ( 3116 )

# GROUP-34

## MAXICODE, AZTEC, CHINESE SENSIBLE CODE (HAN XIN)

---

### MAXICODE

.G043\$



**ENABLE**

.G044\$



DISABLE

.G045\$



MIN LENGTH ( 001 )

.G046\$



MAX LENGTH ( 150 )

---

### AZTEC

.G055\$



**ENABLE**

.G056\$



DISABLE

.G057\$



MIN LENGTH ( 0001 )

.G058\$



MAX LENGTH ( 3832 )

---

### CHINESE SENSIBLE CODE (HAN XIN)

.G059\$



ENABLE

.G060\$



**DISABLE**

.G061\$



MIN LENGTH ( 0001 )

.G062\$



MAX LENGTH ( 4000 )

# GROUP-35

## CODABLOCK A, CODABLOCK F, GS1 COMPOSITE

---

### CODABLOCK A

.G047\$



ENABLE

.G048\$



**DISABLE**

.G049\$



MIN LENGTH ( 001 )

.G050\$



MAX LENGTH ( 600 )

#### WARNING:

1. Once enabled, Code 39 will be automatically disabled to reduce the risks of mistakenly decoding a damaged Codablock A as a Code 39 symbol.
- 

### CODABLOCK F

.G051\$



ENABLE

.G052\$



**DISABLE**

.G053\$



MIN LENGTH ( 0001 )

.G054\$



MAX LENGTH ( 2048 )

#### NOTES:

1. When Codablock F and Code 128 are both enabled, there is some risks of mistakenly decoding a damaged Codablock F symbol as a Code 128 symbol. Therefore, whenever possible, Code 128 should be disabled when Codablock F is enabled.
- 

### GS1 COMPOSITE

.K051\$



ENABLE

.K050\$



**DISABLE**

### UPC/EAN Version GS1 COMPOSITE

.K055\$



ENABLE

.K057\$



UPC/EAN COMPOSITE REQUIRED ON

.K054\$



**DISABLE**

.K056\$



UPC/EAN COMPOSITE REQUIRED OFF



# GROUP-36

FULL ASCII TABLE ( CODE 39 )  
CONTROL CODES

---

|     |   |     |
|-----|---|-----|
| %L  |    | NUL |
| \$A |    | SOH |
| \$B |    | STX |
| \$C |    | ETX |
| \$D |    | EOT |
| \$E |    | ENQ |
| \$F |   | ACK |
| \$G |  | BEL |
| \$H |  | BS  |
| \$I |  | HT  |
| \$J |  | LF  |
| \$K |  | VT  |
| \$L |  | FF  |
| \$M |  | CR  |
| \$N |  | SO  |
| \$O |  | SI  |

# GROUP-37

## FULL ASCII TABLE ( CODE 39 ) CONTROL CODES

---

|     |  |
|-----|--|
| DLE | \$P<br>   |
| DC1 | \$Q<br>   |
| DC2 | \$R<br>   |
| DC3 | \$S<br>   |
| DC4 | \$T<br>   |
| NAK | \$U<br>   |
| SYN | \$V<br>  |
| ETB | \$W<br> |
| CAN | \$X<br> |
| EM  | \$Y<br> |
| SUB | \$Z<br> |
| ESC | %A<br>  |
| FS  | %B<br>  |
| GS  | %C<br>  |
| RS  | %D<br>  |
| US  | %E<br>  |
| SP  |         |

# GROUP-38

FULL ASCII TABLE ( CODE 39 )  
SYMBOLS

---

|     |  |    |
|-----|--|----|
| +   |  | +  |
| -   |  | -  |
| .   |  | .  |
| \$  |  | \$ |
| %   |  | %  |
| /   |  | /  |
| %L  |  | \  |
| / A |  | !  |
| %V  |  | @  |
| / C |  | #  |
| %N  |  | ^  |
| %S  |  | ~  |
| / F |  | &  |
| / J |  | *  |
| %□  |  | -  |
| %H  |  | =  |
| %Q  |  |    |

# GROUP-39

FULL ASCII TABLE ( CODE 39 )  
SYMBOLS

---

|     |  |
|-----|--|
| {   | %P<br>    |
| }   | %R<br>    |
| [   | %K<br>    |
| ]   | %M<br>    |
| (   | / H<br>   |
| )   | / I<br>   |
| <   | %G<br>  |
| >   | %I<br>  |
| ,   | %W<br>  |
| "   | / B<br> |
| '   | / G<br> |
| ,   | / L<br> |
| ;   | %F<br>  |
| :   | / Z<br> |
| ?   | %J<br>  |
| DEL | %T<br>  |

# GROUP-40

FULL ASCII TABLE ( CODE 39 )  
UPPER CASE ALPHABETS

---



A



B



C



D



E



F



G



H



I



J



K



L



M

# GROUP-41


FULL ASCII TABLE ( CODE 39 )  
UPPER CASE ALPHABETS

---


N 

O 

P 

Q 

R 

S 

T 

U 

V 

W 

X 

Y 

Z 

# GROUP-42

FULL ASCII TABLE ( CODE 39 )  
LOWER CASE ALPHABETS

---

+A



a

+B



b

+C



c

+D



d

+E



e

+F



f

+G



g

+H



h

+I



i

+J



j

+K



k

+L



l

+M



m

# GROUP-43

FULL ASCII TABLE ( CODE 39 )  
LOWER CASE ALPHABETS

---

n 

o 

p 

q 

r 

s 

t 

u 

v 

w 

x 

y 

z 



# GROUP-44

FULL ASCII TABLE ( CODE 39 )  
NUMBERS

---



0



1



2



3



4



5



6



7



8



















9

# GROUP-45

## FULL ASCII TABLE ( CODE 39 ) FUNCTION KEYS

---

|                     |       |   |
|---------------------|-------|---|
| F1                  | \$TA  |    |
| F2                  | \$TB  |    |
| F3                  | \$TC  |    |
| F4                  | \$TD  |    |
| F5                  | \$TE  |    |
| F6                  | \$TF  |    |
| F7                  | \$TG  |   |
| F8                  | \$TH  |  |
| F9                  | \$TI  |  |
| F10                 | \$TJ  |  |
| F11                 | \$TK  |  |
| F12                 | \$TL  |  |
| Home                | \$TM  |  |
| End                 | \$TN  |  |
| Enter (Numeric Key) | \$T+D |  |
| App                 | \$T+□ |  |

# GROUP-46

FULL ASCII TABLE ( CODE 39 )  
NAVIGATION KEYS

---

\$TQ



Cursor Right

\$TP



Cursor Left

\$TQ



Cursor Up

\$TR



Cursor Down

\$TS



Page Up

\$TT



Page Down

\$TU



Tab

\$TV



Back Tab

\$TW



Esc

\$TX



Enter

\$TY



BS

\$TZ



Ins

\$T%K



Del

# GROUP-47

## FULL ASCII TABLE ( CODE 39 ) MODIFIER KEYS

---

\$T%L



Alt (Left) make\*1

\$T+E



Alt (Right) make

\$T%N



Shift (Left) make \*2

\$T+I



Shift (Right) make

\$T+K



Win (Left) make

\$T+M



Win (Right) make

\$T%W



Ctrl (Left) make \*3

\$T+G



Ctrl (Right) make

\$T%M



Alt (Left) break

\$T+F



Alt (Right) break

\$T%O



Shift (Left) break

\$T+J



Shift (Right) break

\$T+L



Win (Left) break

\$T+N



Win (Right) break

\$T+A



Ctrl (Left) break

\$T+H



Ctrl (Right) break

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For UK Keyboard Special Character

\$T+B



\$T+C



£

### Note:

\*1: When "Alt(Left)Make" is programmed, please scan "Alt(Left)Break" to resume barcode setting.

\*2: When "Shift(Left)Make" is programmed, please scan "Shift(Left)Break" to resume barcode setting.

\*3: When "Ctrl(Left)Make" is programmed, please scan "Ctrl(Left)Break" to resume barcode setting.

# APPENDIX 1

## DEFAULT TABLE 1

| GROUP                           | PARAMETER                         | DEFAULT                               |
|---------------------------------|-----------------------------------|---------------------------------------|
| 1                               | Interface                         | N/A (normally USB HID out of box)     |
|                                 | Setup Code                        | ON                                    |
|                                 | Function Code Conversion          | Enable                                |
| 2                               | Reading Mode                      | Auto-sensing Mode (Infrared)          |
| 3                               | Scan Interval                     | 1.0 sec                               |
|                                 | LED Auto-Off Timeout              | 0 sec                                 |
|                                 | Identical Read Interval           | 1.0 sec                               |
| 4                               | No Read Status                    | Disable                               |
|                                 | No Read Message                   | No Read                               |
|                                 | Imager Sensitivity                | 5                                     |
|                                 | Mobile Phone Mode                 | Disable                               |
| 5                               | Beep Tone                         | Medium                                |
|                                 | Beep Mode                         | Normal                                |
|                                 | Terminator                        | CR (USB HID)<br>CR+LF (USB VCP/RS232) |
| 6                               | Send Data Length                  | OFF                                   |
|                                 | Preamble                          | None                                  |
|                                 | Postamble                         | None                                  |
| 7                               | Inverse Barcode                   | 1D Disable; 2D Disable                |
|                                 | Code ID (Symbology ID)            | Disable                               |
| 9~11                            | Set ID                            | None                                  |
| 12                              | Interblock Delay                  | 0mS                                   |
|                                 | Intercharacter Delay              | 0mS                                   |
| 13                              | Keyboard Layout                   | English (USA)                         |
| 14                              | Capital Lock Mode                 | OFF                                   |
|                                 | Numeric Key                       | Alphanumeric Key                      |
|                                 | HT/CR/ESC Conversion              | Disable                               |
| 15                              | UTF-8 to Unicode Conversion       | Disable                               |
| 16                              | Baud Rate                         | 9600                                  |
|                                 | Data Bits & Parity                | 8 bits, None                          |
| 17                              | Stop Bits                         | 1 Stop Bit                            |
|                                 | Handshaking                       | None                                  |
|                                 | ACK/NAK                           | OFF                                   |
|                                 | Flow Control Timeout              | 1 sec                                 |
|                                 | BCC                               | OFF                                   |
| 18~20                           | <b>Enable/Disable Symbologies</b> |                                       |
|                                 | Code 32                           | Disable                               |
|                                 | Industrial 2 of 5                 | Disable                               |
|                                 | Matrix 2 of 5                     | Disable                               |
|                                 | Interleaved 2 of 5                | Enable                                |
|                                 | Code 128                          | Enable                                |
|                                 | Codabar                           | Enable                                |
|                                 | Code 93                           | Enable                                |
|                                 | GS1-128                           | Enable                                |
|                                 | IATA                              | Disable                               |
|                                 | Code 11                           | Disable                               |
|                                 | MSI                               | Enable                                |
|                                 | UPC-A                             | Enable                                |
|                                 | UPC-E                             | Enable                                |
|                                 | EAN-8                             | Enable                                |
|                                 | EAN-13                            | Enable                                |
|                                 | Code 39                           | Enable                                |
|                                 | Full ASCII Code 39                | Enable                                |
|                                 | NEC 2 of 5                        | Enable                                |
|                                 | GS1 Databar Omnidirectional       | Enable                                |
|                                 | GS1 Databar Limited               | Enable                                |
|                                 | GS1 Databar Expanded              | Enable                                |
|                                 | China Post                        | Disable                               |
|                                 | Korea Post                        | Disable                               |
|                                 | PDF417                            | Enable                                |
|                                 | MicroPDF417                       | Disable                               |
|                                 | (Micro) QR Code                   | Enable                                |
|                                 | DataMatrix                        | Enable                                |
| MaxiCode                        | Enable                            |                                       |
| Aztec                           | Enable                            |                                       |
| Codablock A                     | Disable                           |                                       |
| Codablock F                     | Disable                           |                                       |
| Chinese Sensible Code (Han Xin) | Disable                           |                                       |

# APPENDIX 1

## DEFAULT TABLE 2

| GROUP          | PARAMETER                   | DEFAULT                     |
|----------------|-----------------------------|-----------------------------|
| 21             | <b>Interleaved 2 of 5</b>   |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | Disable CDV                 |
|                | Min Length                  | 4                           |
|                | Max Length                  | 80                          |
|                | <b>IATA</b>                 |                             |
|                | Enable/Disable              | Disable                     |
|                | Min Length                  | 4                           |
|                | Max Length                  | 80                          |
|                | <b>Matrix 2 of 5</b>        |                             |
|                | Enable/Disable              | Disable                     |
|                | Min Length                  | 4                           |
| Max Length     | 80                          |                             |
| 22             | <b>Industrial 2 of 5</b>    |                             |
|                | Enable/Disable              | Enable                      |
|                | Min Length                  | 4                           |
|                | Max Length                  | 48                          |
|                | <b>NEC 2 of 5</b>           |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | Disable CDV                 |
|                | Min Length                  | 4                           |
|                | Max Length                  | 80                          |
|                | <b>Code 11</b>              |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | CDV & Send CD (2 digits)    |
| Min Length     | 4                           |                             |
| Max Length     | 80                          |                             |
| 23             | <b>Code 93</b>              |                             |
|                | Enable/Disable              | Enable                      |
|                | Min Length                  | 1                           |
|                | Max Length                  | 80                          |
|                | <b>MSI</b>                  |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | Single Mod 10 & Not Send CD |
|                | Min Length                  | 4                           |
| Max Length     | 48                          |                             |
| 24             | <b>Code 39</b>              |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | Disable CDV                 |
|                | Min Length                  | 1                           |
|                | Max Length                  | 48                          |
|                | Full ASCII Code 39          | Enable                      |
|                | Start/Stop                  | Send                        |
|                | <b>Code 32</b>              |                             |
| Enable/Disable | Disable                     |                             |
| 25             | <b>Codabar</b>              |                             |
|                | Enable/Disable              | Enable                      |
|                | Check Digit Verification    | Disable CDV                 |
|                | Min Length                  | 4                           |
|                | Max Length                  | 60                          |
|                | Start/Stop                  | Not Send                    |
|                | Concatenation               | OFF                         |
| 26             | <b>Code 128</b>             |                             |
|                | Enable/Disable              | Enable                      |
|                | Min Length                  | 1                           |
|                | Max Length                  | 80                          |
|                | ISBT Concatenation          | OFF                         |
|                | <b>GS1-128</b>              |                             |
|                | Enable/Disable              | Enable                      |
|                | Min Length                  | 1                           |
|                | Max Length                  | 80                          |
|                | <b>GS1 Databar</b>          |                             |
|                | GS1 Databar Omnidirectional | Enable                      |
|                | GS1 Databar Limited         | Enable                      |
|                | GS1 Databar Expanded        | Enable                      |
| Min Length     | 4                           |                             |
| Max Length     | 74                          |                             |

# APPENDIX 1

## DEFAULT TABLE 3

| GROUP                    | PARAMETER                 | DEFAULT           |
|--------------------------|---------------------------|-------------------|
| 27                       | <b>UPC-A</b>              |                   |
|                          | Enable/Disable            | Enable            |
|                          | Check Digit Verification  | Send CD           |
|                          | Number System Digit       | Send              |
|                          | UPC-A Expand to EAN-13    | Disable           |
|                          | + 5                       | OFF               |
|                          | + 2                       | OFF               |
|                          | Add a Space               | ON                |
| Addenda Required         | OFF                       |                   |
| 28                       | <b>UPC-E</b>              |                   |
|                          | Enable/Disable            | Enable            |
|                          | Check Digit Verification  | Send CD           |
|                          | Number System Digit       | Send              |
|                          | UPC-E Expand to UPC-A     | Disable           |
|                          | + 5                       | OFF               |
|                          | + 2                       | OFF               |
|                          | Add a Space               | ON                |
|                          | Addenda Required          | OFF               |
| UPC-E1                   | OFF                       |                   |
| 29                       | <b>EAN-8</b>              |                   |
|                          | Enable/Disable            | Enable            |
|                          | Check Digit Verification  | Send CD           |
|                          | + 5                       | OFF               |
|                          | + 2                       | OFF               |
|                          | Add a Space               | ON                |
| Addenda Required         | OFF                       |                   |
| 30                       | <b>EAN-13</b>             |                   |
|                          | Enable/Disable            | Enable            |
|                          | Check Digit Verification  | Send CD           |
|                          | + 5                       | OFF               |
|                          | + 2                       | OFF               |
|                          | Add a Space               | ON                |
|                          | Addenda Required          | OFF               |
| ISBN                     | OFF                       |                   |
| 31                       | <b>China Post</b>         |                   |
|                          | Enable/Disable            | Disable           |
|                          | Min Length                | 4                 |
|                          | Max Length                | 80                |
|                          | <b>Korea Post</b>         |                   |
|                          | Enable/Disable            | Disable           |
|                          | Check Digit Verification  | CDV & Not Send CD |
|                          | Min Length                | 4                 |
|                          | Max Length                | 80                |
|                          | <b>Planet Code</b>        |                   |
|                          | Enable/Disable            | Disable           |
|                          | Check Digit Verification  | CDV & Not Send CD |
|                          | <b>Postnet</b>            |                   |
|                          | Enable/Disable            | Disable           |
| Check Digit Verification | CDV & Not Send CD         |                   |
| 32                       | <b>Australian Post</b>    |                   |
|                          | Enable/Disable            | Disable           |
|                          | Interpretation            | Bar Output        |
|                          | <b>Other Postal Codes</b> |                   |
| Enable/Disable           | Disable                   |                   |

# APPENDIX 1

## DEFAULT TABLE 4

| GROUP                                | PARAMETER                              | DEFAULT |
|--------------------------------------|--|---------|
| 33                                   | <b>PDF417</b>                          |         |
|                                      | Enable/Disable                         | Enable  |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 2750    |
|                                      | <b>MicroPDF417</b>                     |         |
|                                      | Enable/Disable                         | Disable |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 366     |
|                                      | <b>(Micro) QR Code</b>                 |         |
|                                      | Enable/Disable                         | Enable  |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 4000    |
|                                      | <b>DataMatrix</b>                      |         |
| Enable/Disable                       | Enable                                 |         |
| Min Length                           | 1                                      |         |
| Max Length                           | 3116                                   |         |
| 34                                   | <b>MaxiCode</b>                        |         |
|                                      | Enable/Disable                         | Enable  |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 150     |
|                                      | <b>Aztec</b>                           |         |
|                                      | Enable/Disable                         | Enable  |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 3832    |
|                                      | <b>Chinese Sensible Code (Han Xin)</b> |         |
|                                      | Enable/Disable                         | Disable |
| Min Length                           | 1                                      |         |
| Max Length                           | 4000                                   |         |
| 35                                   | <b>Codablock A</b>                     |         |
|                                      | Enable/Disable                         | Disable |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 600     |
|                                      | <b>Codablock F</b>                     |         |
|                                      | Enable/Disable                         | Disable |
|                                      | Min Length                             | 1       |
|                                      | Max Length                             | 2048    |
|                                      | <b>GS1 Composite</b>                   |         |
|                                      | Enable/Disable                         | Disable |
| <b>EAN/UPC Version GS1 Composite</b> |  |         |
| Enable/Disable                       | Disable                                |         |
| EAN/UPC Composite Required           | Off                                    |         |