



# **Ez One Shot<sup>®</sup>**

## **BARCODE SCANNER USER'S MANUAL**





# WARNING

Please power down the host computer before connecting this wand. This is critical to protecting both the wand and the host from serious damage

## Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

***FCC Caution:*** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

### ***FCC Radiation Exposure Statement***

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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## INTRODUCTION

This scanner apply with Ez one shot easy programming decoder, It is specially designed to deliver high-end bar code reading performance at the lowest possible price. The scanner utilizes exceptional decoding technology. One-time settings are easily made by scanning set-up bar codes in this handy user's manual. This bar code scanner uses CCD or optical diode technology which does not have moving part, provide rugged reliable quality, enables it suit for any harsh environment conditions. Furthermore, the LED illumination light source of scanner provides less harmful beam to human eyes, and more longer product lifetime.

**The Ez One shot decoder are mainly apply to the following categories bar code scanner for your reference:**

1. Short Range- The reading distance is about from contact to 100mm,
2. Mid Range- The reading distance is about from contact to 180mm,
3. Long Range - The reading distance is about from 5mm to 300mm,
4. Wand or Pen bar code scanner.
5. Scan Engine and Fixed Mount scanner .

Notes: ( Please contact your distributor for the detail model number.)

## GENERAL

This scanner has many settings that can be used to conform the unit to the requirements of a particular application. For most usages, however, the default settings programmed into the unit at the factory are appropriate. It is not recommended that the default settings be changed unless there is a specific need to alter the characteristics of the scanner's performance.



## EZ TROUBLESHOOTING

The scanner is easy to install and use. Many problems encountered can be attributed to a wrong setting that has been programmed into the scanner. Before troubleshooting the problem, try this:

1. Unplug the cable from the host computer.
2. Plug the cable back into the host computer.
3. Reset the scanner settings to DEFAULT (Group 1).

. A001\$



If these steps do not resolve the problem, please refer to the troubleshooting table on the next page. If this fails to correct the problem, please consult the troubleshooting section beginning on page 64~66 for further assistance.

**Figure 2**

		<b>Solutions</b>	
<b>No</b>	<b>Kind of Troubles</b>	<b>Symptoms</b>	<b>Solutions</b>
1	Computer Type ( Group 1)	Scanner seems to be performing as usual, but no data is being output.	<ol style="list-style-type: none"> <li>1. Unplug the cable from the host computer.</li> <li>2. Plug the cable back into the host computer.</li> <li>3. Set the scanner to the exact computer type immediately.</li> </ol>
2	Interfaces Selections ( Group 1)	The scanner does not scan when the trigger is depressed.	<ol style="list-style-type: none"> <li>1. Unplug the cable from the host computer.</li> <li>2. Plug the cable back into the host computer.</li> <li>3. Set the scanner to the correct interface. The cable needs to match the interface.</li> </ol>
3	Setting Procedure have not completed ( Setting Need Triple Shot scanning ) ----- Group -4,5,8,9, 17, 18, 19,20,22,23,25, 31	<p>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. They are:</p> <ol style="list-style-type: none"> <li>1. Preamble, Postamble (Group 4)(page 14)</li> <li>2. Accuracy Adjustment (Group 5)(page 15)</li> <li>3. Customer ID Configuration (Groups 8 and 9)(page 18-19)</li> <li>4. Min/Max Length (Groups 17, 18, 19, 20, 21, 22, 25)</li> <li>5. ABC Codabar (Groups 22)</li> <li>6. CX-Codabar (Groups 22 and 23)</li> <li>7. Coupling Codabar (Groups 22 and 23)</li> <li>8. EAN 128 (Group 31)</li> </ol>	<ol style="list-style-type: none"> <li>1. Follow the procedures for these settings at the appropriate pages.</li> <li>2. The scanner will beep three times for an incomplete setting.</li> <li>3. Scan RESET to try a setting again.</li> </ol>
4	Limitation of length of the bar code	The scanner is reading correctly, except for certain bar codes of a certain length	Reset the Min/Max setting for the bar code symbology affected.
5	RS232 Protocol Communication setting problem	The scanner appears to be working in the RS-232 interface, but no data is output.	Ensure the correct RS-232 communication parameters have been set: Baud Rate, Handshaking, Stop Bits, Data Bits, and Parity. These settings must be the same for both the scanner and the host.

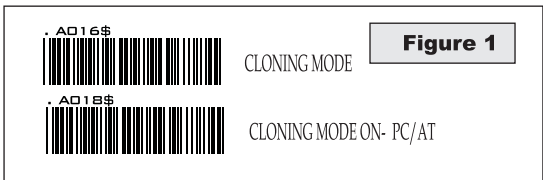
# CLONING MODE

## WHAT IS CLONING MODE?

CLONING duplicates a wand's settings in other wands. It can save time when a number of wands 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.



*.A018\$( Cloning Mode on PC/AT) - you can clone the settings to a PC/AT regardless what kind of device has been chosen on the scanner*

## 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 gate for cloning.
5. The cloning string's length can be adjusted by combining multiple strings into one, or by breaking one string to 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 rows >>> ".A017\$" ( never edit any data of the first row )

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

3rd rows~ so on >>> XXXX

End rows- A dot "." Is an ending of cloning.

XXXX Stand for any String

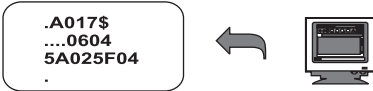
**EXAMPLE :**

**1. PROJECT ASSIGNMENTS :**

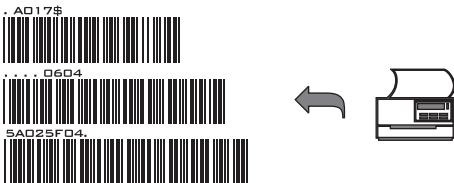
- 1.1. Beep tone: **BEEP LOW -- HIGH .**
- 1.2. Capslock Mode: **CAPSLOCK ON ( FIXED ).**
- 1.3. Reading Mode: **CONTINUOUS AUTO OFF.**

**2. SETTING PROCEDURE:**

- 2.1. Scan **BEEP LOW.--HIGH (GROUP 3).(page13)**
  - 2.2. Scan **CAPSLOCK ON (FIXED).(GROUP 3).**
  - 2.3. Scan **CONTINUOUS AUTO OFF. (GROUP2).(page12)**
3. All parameters will be converted to 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 these labels with any of the wands that must be programmed with the same settings as the first wand. Be sure to scan from the first row to the second and so on sequentially, top to bottom.

**CORRECT SETTING**

.A017\$ .... 0604 5A02 5F04 .	4 4 4 4 . (Dot)	.A017\$ ....06045A02 5F04.	12 4+.( Dot)
----------------------------------------------	-----------------------------	----------------------------------	-----------------

**WRONG SETTING**

<div style="border: 1px solid black; padding: 5px;">                 .A017\$                  ..                  ..0604                  5A02                  5F04                  .             </div>	←	<p><b>Wrong Setting:</b> The string"...."                  Consists of 4 Dots, located at the                  beginning of second rows, Do not                  break the "...." Into multiple string.</p>
<div style="border: 1px solid black; padding: 5px;">                 .A017\$                  ....06045                  A025F04                  .             </div>	✓ 9 x } 7 x } . (Dot) ✓	<p><b>Wrong Setting:</b> The string lengths in the                  second and third rows do not match the                  length requirements, because rows should                  be in lengths of four digits.</p>
<div style="border: 1px solid black; padding: 5px;">                 .A017\$....                  0604                  5A02                  5F04.             </div>	X ←	<p><b>Wrong Setting Because you add                  "...." After .A017\$</b>                  The 0.A17\$ is a FIXED parameter for                  setup entering. It is an unchangeable                  parameter. <b>Never adds, delete or                  rearrange data from the FIRST row.</b></p>

# GETTING STARTED

## HOW TO CONNECT THE WAND TO THE HOST COMPUTER

### KEYBOARD WEDGE INTERFACE

1. Power down the host computer.
2. Disconnect the keyboard cable from the computer.
3. Connect the "Y" cable between the keyboard and the wand and the computer.
4. Restart the computer.
5. The wand will beep.
- 6 Set the wand to KEYBOARD interface by referring to GROUP 1 (page11) (Interface Selections).
7. Wand will beep to confirm the setting.
8. Scan a bar code to confirm that data shows on the monitor.



### USB INTERFACES

The USB Interface is compatible with the Apple MAC series, later PCs and Windows 98, 2000, Me, and XP.

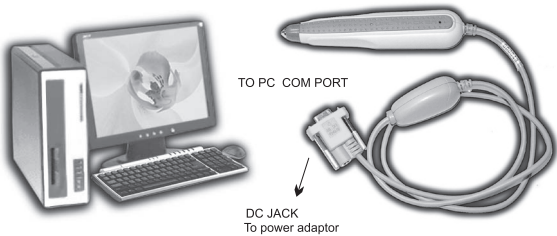
1. Connect the USB cable between the scanner and the computer.
2. The scanner will beep.
3. The Scanner will detect the USB driver automatically. (The first time the scanner is connected via the USB port, follow the appropriate instructions for the host computer.)
4. Set the scanner to KEYBOARD/USB interface by referring to GROUP 1 (page11) (Interface Selections).
5. Scanner will beep to confirm the setting.
6. Scan a bar code to confirm that data shows on the monitor.





## RS-232 INTERFACE

1. Power down the host computer.
2. Connect the RS-232 cable between the wand and the computer.
3. Connect the power adaptor to the cable.
4. Restart the computer.
5. Plug the power adaptor into a power outlet.
6. The wand will beep.
7. Set the wand to RS-232 interface by referring to GROUP 1 (page 11) (Interface Selection).
8. Set RS-232 protocol: Baud Rate, Stop Bits, Handshaking, Data Bits, and Parity.
9. Scan a bar code to confirm that data shows on the monitor.



Check the power adaptor to ensure:

1. Input of AC current 110V/ 220V matches the power supply standard of the country in which the scanner is being used.
2. Adapter output is +5V DC
3. The jack input is +5V DC



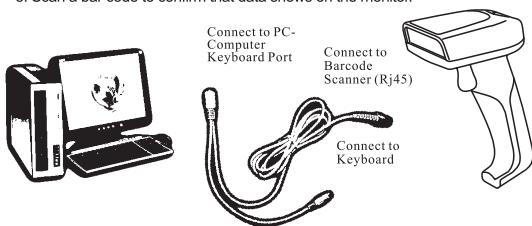
### NOTES:

1. Before plugging the power adaptor into the wand, be sure the voltage, power consumption, and inner and outer DC characteristics are correct to avoid serious damage to the wand and/or the computer.
2. Make sure the protocol communication settings of the wand (such as baud rate, data bits, etc.) match those of the host computer. Otherwise, no data will be transmitted..

# HOW TO CONNECT THE SCANNER TO THE HOST TERMINAL: Handheld Barcode Scanner

## KEYBOARD WEDGE INTERFACE

1. Power down the host computer.
2. Disconnect the keyboard cable from the computer.
3. Connect the "Y" cable between the keyboard and the scanner and the computer.
4. Restart the computer.
5. The scanner will beep.
6. Set the scanner to KEYBOARD interface by referring to GROUP 1 (page 11) (Interface Selections).
7. Scanner will beep to confirm the setting.
8. Scan a bar code to confirm that data shows on the monitor.

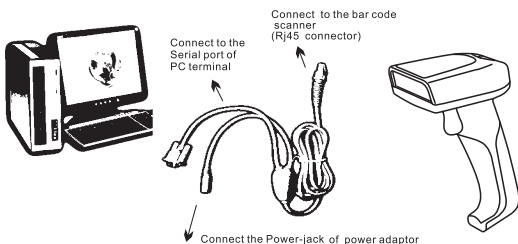


## RS-232 INTERFACE

1. Power down the host computer.
2. Connect the RS-232 cable between the scanner and the computer.
3. Connect the power adaptor to the cable.
4. Restart the computer.
5. Plug the power adaptor into a power outlet.
6. The scanner will beep.
7. Set the scanner to RS-232 interface by referring to GROUP 1 (page 11) (Interface Selection).
8. Set RS-232 protocol: Baud Rate, Stop Bits, Handshaking, Data Bits, and Parity.
9. Scan a bar code to confirm that data shows on the monitor.

### NOTES:

1. Before plugging the power adaptor into the scanner, be sure the voltage, power consumption, and inner and outer DC characteristics are correct to avoid serious damage to the scanner and/or the computer.
2. Make sure the protocol communication settings of the scanner (such as baud rate, data bits, etc.) match those of the host computer. Otherwise, no data will be transmitted..



Check the power adaptor to ensure:

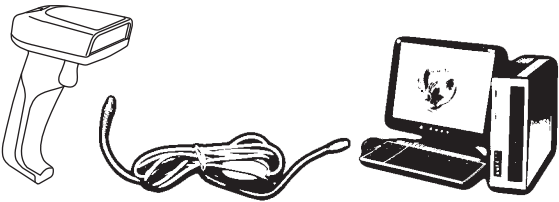
1. Input of AC current 110V/ 220V matches the power supply standard of the country in which the scanner is being used.
2. Adapter output is +5V DC
3. The jack input is +5V DC



## USB INTERFACES

The USB Interface supported is compatible with the Apple MAC series, later PCs and Windows 98, 2000, Me, and XP.

1. Connect the USB cable between the scanner and the computer.
2. The scanner will beep.
3. The Scanner will detect the USB driver automatically. (The first time the scanner is connected via the USB port, follow the appropriate instructions for the host computer.)
4. Set the scanner to KEYBOARD/USB interface by referring to GROUP-1 (Interface Selections).
5. Scanner will beep to confirm the setting.
6. Scan a bar code to confirm that data shows on the monitor.

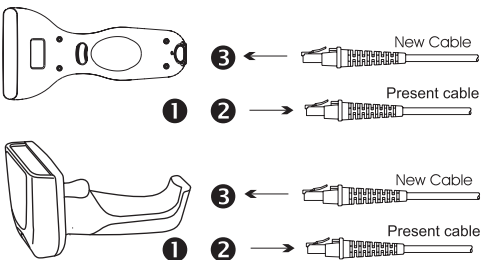


## HOW TO CHANGE A CABLE

The CCD scanner are designed to switch easily between interface options. To switch from one interface to another, the appropriate cable must be installed. To change a cable, simply follow these steps:

1. To release the cable, insert a pin or straightened paper clip into the hole at the base of the scanner where the cable is connected.
2. Remove the cable from the scanner.
3. Plug in the new cable.

After changing to a new cable, be sure to reset the interface setting as appropriate (including parameter settings for the RS-232 interface).





# GROUP-1

INTERFACES SELECTION, COMPUTER TYPE, DEFAULT, SCAN SPEED.

## DEFAULT

. A001\$



## COMPUTER TYPE

. C004\$



PC-AT

. C006\$



MAC ADB

. C007\$



NOTEBOOK\*

SYMPTOMS	SOLUTION
Scanner seems to be performing as usual, but no data is being output.	<ol style="list-style-type: none"> <li>1. Unplug the cable from the host computer.</li> <li>2. Plug the cable back into the host computer.</li> <li>3. Set the scanner to the exact computer type immediately.</li> </ol>

**Caution:** Please ensure the correct computer type is set when the scanner is attached to a new host computer. If set to Notebook, the scanner will operate with no external keyboard.

. C001\$



KEYBOARD& USB\*1,

. C003\$



WAND

\*1 USB V1.3 or small Version

\*2 USB V2.2 or great Version

Contact /pen type use only

## INTERFACES SELECTION

. C002\$



RS232

. C005\$



USB\*2

SYMPTOM	SOLUTION
The wand does not scan/ The scanner does not scan when the trigger is depressed.	<ol style="list-style-type: none"> <li>1. Unplug the cable from the host computer.</li> <li>2. Plug the cable back into the host computer.</li> <li>3. Set the wand to the correct interface. The cable needs to match the interface.</li> </ol>

**Caution:** This scanner is designed to switch easily between interface options. To switch from one interface to another, the appropriate cable must be installed. After changing to a new cable, be sure to reset the interface setting as appropriate.

## SCAN SPEED

. B017\$



AMIC 45 Scans

. B018\$



AMIC 90 Scans

Contact /pen type use only

# GROUP-2

## READING MODE SETTING

---

. F005\$



CONTINUOUS MODE

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

. F001\$



FLASH MODE

- \*The LED is on steadily if a bar code is close to the scanner, but starts to flash if no bar code has been detected after 60 seconds.
- \* This trigger is still have functionality.

. F002\$



**TRIGGER MODE**

- \* The LED will light when the trigger is pressed.
- \* The LED will go off when the trigger is released.

. F006\$



CONTINUOUS AUTO OFF

- \* The LED is always on when the trigger is pressed .
- \* The LED will go off if no bar code has been detected after 60 seconds.

. F003\$



TOGGLE MODE

- \* This function works like Trigger Mode, but the scanner beeps to indicate a good read.

. F007\$



\*AUTO SENSING MODE

- \* If Auto-Sensing (Triggerless) Mode is on, the LED will go off if the scanner does not detect a bar code.
- \* The LED lights automatically when a bar code is detected.

. F008\$



\*ULTRAVIOLET MODE

- \* If Ultraviolet Mode is on, the ultraviolet light source will light and stay on continuously.
- \* The ultraviolet light will go off when the trigger is pressed, and back on when the trigger is released.

. F004\$



TEST MODE

- \* Factory Test Scanning

### NOTES:

1. To extend the scanner's life, keep the scanner set to Trigger Mode or Continuous Auto Off Mode.
2. Only certain models support Auto Sensing or Ultraviolet Modes.
3. For convenience, print the bar code for Ultraviolet Mode and keep it near the work station for easy scanning when needed.
4. In Ultraviolet Mode, press the trigger button and the reading mode will swift from Ultraviolet Mode to the reading mode the scanner was last in.
5. The LED will glow RED for STANDBY and GREEN for GOOD READ.
6. The Trigger Mode is available for most handheld bar code scanner, but The trigger is only available to wands with a switch capability.

# GROUP-3

CHECK VERSION, BEEP TONE , TERMINATOR SEND DATA LENGTH

## BEEP TONE MODE

2.7KHz

.F019\$



BEEP HIGH

.F021\$



BEEP HIGH--LOW

.F018\$



**BEEP MEDIUM**

.F020\$



BEEP LOW--HIGH

.F022\$



BEEP LOW

2.1KHz

.F012\$



BEEP OFF

.F014\$



BEEP HIGH

.F016\$



BEEP HIGH--LOW

.F013\$



**BEEP MEDIUM**

.F015\$



BEEP LOW--HIGH

.F017\$



BEEP LOW

Contact /pen type use only

## CHECK VERSION

.A007\$



CHECK VERSION

## TERMINATOR

.D010\$



NONE

.D011\$



LF

.D012\$



**CR**

.D013\$



**CR+LF**

.D014\$



TAB

.D015\$



SPACE

.D016\$



ESC

## NOTES:

1. For the Keyboard Wedge interface the default terminator is CR.
2. For the USB interfaces the default terminator is CR,
3. For the RS232 interfaces the default terminator is CR+LF

## SEND DATA LENGTH

.D019\$



SEND DATA LENGTH ON

.D020\$



SEND DATA LENGTH OFF

# GROUP-4

SETUP CODE READ, PREAMBLE & POSTAMBLE.

---

## SETUP CODE READ



### NOTE :

- \* 1 This setting is disable to all User's Manual Code setting. To use bar code setting, Scan Setup Code On enable bar code setting.
- 

## PREAMBLE & POSTAMBLE ( PREFIX AND SUFFIX )



### 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.

### FORMAT:

{ Preamble}{CodeID}{Bar Code}{Postamble}

### 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 bar code.
- 3. Default value for either: None.



# GROUP-5

## ACCURACY ADJUSTMENT

---



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### ACCURACY ADJUSTMENT



Accuracy Adjustment assures a more reliable decoded output. Enabling the feature and setting a number from 1 to 9 subjects the decoded output a higher standard of accuracy. The higher the number, the greater the accuracy.

---

#### SETTING PROCEDURE:

1. Scan ACCURACY ADJUSTMENT.
2. Scan one digit ( 1~9) from barcode menu above.
3. Scan ACCURACY ADJUSTMENT.

**RESET**



#### NOTES:

1. The scanner will beep three times as reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., scan RESET to start again.

# GROUP-6

## LABEL TYPE POSITIVE / NEGATIVE, ENABLE AND DISABLE CODE ID

### LABEL TYPE POSITIVE / NEGATIVE

.D021\$



DISABLE NEGATIVE LABEL  
(POSITIVE LABEL ENABLE)

.D022\$



ENABLE NEGATIVE LABEL  
(POSITIVE & NEGATIVE ENABLE)

Contact /pen type can't use

### ENABLE CODE ID

.A008\$



FACTORY ID ON

.A014\$



AIM ID ON

.A015\$



SET ID -ON

### DISABLE CODE ID

.A009\$



### NOTES:

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

#### EXAMPLE :

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

145287	JE0	4563987123453	12411
Preamble 145287	CODE ID AIM ID : JE0	BARCODE / DATA EAN 13 +5	
OUTPUT : 145287]E0456398712345312411			

# GROUP-7

## SYBBOLOGIES CODE ID IDENTIFIER, SET ID

SYBBOLOGIES CODE ID IDENTIFIER					
Symbologies	Factory ID	AIM ID (new)	Symbologies	Factory ID	AIM ID (new)
MSI	O	]M0	EAN 128	T	]C1
MSI(MOD 10 / CDV & not send CD)		]M1	Code 128	K	]C0
EAN8(+2/+5 OFF)	S	]E4	Code 32	B	]X0
EAN8(+2 ON)		]E4	Codabar	N	]F0
EAN8(+5 ON)		]E4	Codabar(ABC Codabar)		]F1
UPC-E(+2/+5 OFF)	E	]E0	Codabar(CDV & Send CD)		]F2
UPC-E(+2 ON)		]E3	Codabar(CDV & not send CD)	]F4	
UPC-E(+5 ON)		]E3	UK Plessey	P	]P0
UPC-A(+2/+5 OFF)	A	]E0	Matrix 2 of 5	Y	]X0
UPC-A(+2 ON)		]E3	Full ASCII Code 39(disable CDV)	D	]A4
UPC-A(+5 ON)		]E3	Full ASCII Code 39(CDV & send CD)		]A5
	]E3	Full ASCII Code 39(CDV & not send CD)	]A7		
EAN-13(+2/+5 OFF)	F	]E0	Full Standard Code 39(disable CDV)	M	]A0
EAN-13(+2 ON)		]E3	Standard Code 39(CDV & send CD)		]A1
EAN-13(+5 ON)		]E3	Standard Code 39(CDV & not send CD)		]A3
Code 93	L	]G0	TA 2 of 5	R	]R0
Code 11(disable CDV)	J	]H0	Industrial 2 of 5	V	]S0
Code 11(send one CD)		]H0	China Post Code	H	]X0
Code 11(send two CD)		]H1	Interleaved 2 of 5(CDV & send CD)	I	]I1
Code 11(not send CD)		]H3	Interleaved 2 of 5(CDV & not send CD)		]I3
Telepen(ASCII)	U	]B0	Interleaved 2 of 5(disable CDV)		]I0
Telepen(Numeric)		]B1	Data Bar(Rss)	G	]E0

## SET ID - SETTING PROCEDURES

Setting steps:

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

**Example :Define the MSI Code ID = A, Code 93 = G9**

**MSI :**

**Step1: Scan MSI Set ID (Group 9). (page19)**

**Step2: "A" from Group 37. (page55)**

**Step3: Scan MSI Set ID (Group 9). (page19)**

**Code 93:**

**Step1: Scan Code 93 Set ID (Group 8). (page18)**

**Step2: "G" from Group 38, Scan "9" from Group 33..(page51)**

**Step3: Scan Code 93 Set ID (Group 8). (page18)**

### NOTES:

1. The length of a Code ID is either one or two characters. If one character is set, the Code ID output will be one character. If two characters are set, the Code ID output will be two characters.
2. Only one type of Code ID will be sent.

# GROUP-8

## CODE ID CONFIGURATION: SET 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\$



EAN128 Set ID

. P022\$



Telepen Set ID

. P009\$



Code 11 Set ID

. P011\$



Code 32 Set ID

# GROUP-9

## CODE ID CONFIGURATION: SET ID

---

China Post Code  
[ TOSHIBA Code ] Set ID



MSI Code Set ID



UK Plessy Set ID



Matrix 2 of 5 Set ID



Interleaved 2 of 5  
Set ID



Industrial 2 of 5 Set ID



Full ASCII Code39  
Set ID



RSS 14/LIMITED



RSS-Expand Set ID



RSS-14 Set ID



LABEL Code Set ID  
( Reserved )



---

# RESET



1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., scan RESET to start again.

# GROUP-10

## DELAY BETWEEN BLOCKS AND CHARACTERS

---

### INTERBLOCK DELAY

. B001\$ 	<b><u>0mS</u></b>
. B002\$ 	10mS
. B003\$ 	50mS
. B004\$ 	100mS
. B005\$ 	200mS
. B006\$ 	500mS

---

### INTERCHARACTER DELAY

. B010\$ 	<b><u>140uS</u></b>
. B011\$ 	500uS
. B012\$ 	1mS
. B013\$ 	4mS
. B014\$ 	16mS

# GROUP-11

## KEYBOARD LAYOUT / CAPLOCK MODE / NUMERIC KEY

---

### KEYBOARD LAYOUT



(X) Contact /pen type can't use

### CAPITAL LOCK MODE



### NOTE:

① When Barcode scanner set to Caplock Free mode. No matter of 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



# GROUP-12

Rs232: BAUD RATE,DATA BITS & PARITY

---

## BAUD RATE

. E001\$



300

. E002\$



600

. E003\$



1200

. E004\$



2400

. E005\$



4800

. E006\$



**9600**

. E007\$



19200

. E022\$



38400

---

## 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-13

Rs232 : STOP BIT, HANDSHAKING, ACK/NAK, FLOW CONTROL ,BCC

---

## STOP BITS

. E016\$



**1 STOP BITS**

. E017\$



2 STOP BITS

---

## HANSHAKING

. 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 (Binary Check Characher)

. E029\$



RS232 BCC Char On

. E030\$



RS232 BCC Char Off

# GROUP-14

## WAND EMULATION PARAMETER SETTING

---

. D001\$



**200us**

**LEVEL DURATION OF  
MINI WIDTH**

. D002\$



600us

. D003\$



LOW

**POLARITY OF  
IDLE CONDITION**

. D004\$



**HIGH**

. D005\$



**Bar High / Space Low**

**OUTPUT OF WAND  
EMULATION**

. D006\$



Bar Low / Space High

. D007\$



PEN TYPE

**WAVE FORM**

. D008\$



**FULL ASCII CODE 39**

**GROUP 15~ 33**  
**SYMBOLLOGIES**  
**FORMATTING**

# GROUP-15

## ENABLE SYMBOLOGIES

---

. A002\$



ENABLE ALL CODE

. K010\$



CODE 32

. K001\$



**CHINA POSTAL CODE**

. L010\$



UK PLESSY CODE

. N001\$



INDUSTRIAL 2 OF 5

. M010\$



MATRIX 2 OF 5

. J001\$



**INTERLEAVED 2 OF 5**

. J010\$



**CODE 128**

. I001\$



**CODABAR**

. L014\$



TELEPEN

. G021\$



PDF417

. H001\$



**UPC-A**

. H007\$



**UPC-E**

. H019\$



**EAN -8**

. H013\$



**EAN -13**

. L001\$



MSI

. G008\$



**CODE 39**

. I010\$



**CODE 11**

. G010\$



CODE 93

. M001\$



**EAN-128**

. N017\$



IATA

# GROUP-16

## DISABLE SYMBOLOGIES

---

. A003\$



DISABLE ALL CODE

. K011\$



**CODE 32**

. K002\$



CHINA POSTALCODE

. L011\$



**UK PLESSY CODE**

. N002\$



**INDUSTRIAL 2 OF 5**

. M011\$



**MATRIX 2 OF 5**

. J002\$



INTERLEAVED 2 OF 5

. J011\$



CODE 128

. I002\$



CODABAR

. L015\$



**TELEPEN**

. G022\$



**PDF417**

. H002\$



UPC-A

. H008\$



UPC-E

. H020\$



EAN-8

. H014\$



EAN-13

. L002\$



**MSI**

. G009\$



CODE 39

. I011\$



CODE 11

. G011\$



**CODE 93**

. M002\$



EAN -128

. N018\$



**IATA**

# GROUP-17

SYMBOLOGIES : CODE 32CHINA POST CODE ( TOSHIBA CODE ),

---

**CHINA POSTAL CODE  
[ TOSHIBA CODE ]**

. K001\$



**ENABLE**

. K002\$



DISABLE

. K003\$



**DISABLE CDV**

. K004\$



CDV & SEND CD

. K005\$



CDV & NOT SEND CD

. K006\$



MIN LENGTH ( 11 )

. K007\$



MAX LENGTH ( 48 )

# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-18

SYMBOLOGIES : MSI CODE , UK PLESSY CODE

---

. L001\$



ENABLE

. L002\$



**DISABLE**

. L004\$



**CDV & SEND CD**

. L003\$



CDV & NOT SEND CD

. L007\$



CHECK DIGIT DOUBLE  
MOD 10

**MSI**

. L008\$



CHECK DIGIT DOUBLE 11  
PLUS MOD 10

. L009\$



**CHECK DIGIT SINGLE  
MOD 10**

. L005\$



MIN LENGTH ( 6 )

. L006\$



MAX LENGTH ( 48 )

. L010\$



ENABLE

. L011\$



**DISABLE**

**UK PLESSY CODE**

. L012\$



CDV & SEND CD

. L013\$



**CDV & NOT SEND CD**



# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-19

SYMBOLOGIES: CODE 93, TELEPEN, IATA

---



MIN LENGTH ( 6 )



TELEPEN ASCII



CDV & NOT SEND CDV



# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-20

SYMBOLOGIES : INTERLEAVED 2 OF 5 , CODE 11.

---



**ENABLE**



DISABLE



**DISABLE CDV**



CDV & SEND CD



CDV & NOT SEND CDV

## INTERLEAVE 2 OF 5



First digit suppressed



Last digit suppressed



**NO suppressed**



MIN LENGTH ( 6 )



MAX LENGTH ( 48 )



ENABLE



**DISABLE**



**DISABLE CDV**



CDV & SEND CD



CDV & SEND CD  
(1 DIGIT)

## CODE 11



CDV & SEND CD  
(2 DIGITS)



CDV & NOT SEND CD



MIN LENGTH ( 6 )



MAX LENGTH ( 32 )

# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-21

SYMBOLOGIES : INDUSTRIAL 2 OF 5, MATRIX 2 OF 5

---



## INDUSTRIAL 2 OF 5



## MATRIX 2 OF 5



# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-22

## SYMBOLOLOGIES: CODABAR

---



**ENABLE**



DISABLE



**DISABLE CDV**



CDV & SEND CD

## CODABAR



CDV & NOT SEND CD



MIN LENGTH ( 6 )



MAX LENGTH ( 48 )



ST/SP: abcd/abcd



**ST/SP: ABCD/ABCD**



ST/SP: ABCD/TN\*E



ST/SP:abc/tn\*e

## START / STOP



**SEND START /STOP**



Not Sent START / STOP

### Example of ST ( Start ) / SP ( Stop )

123456	Not Transmit ST/SP
A123456B	ST/SP: ABCD/ABCD
a123456b	ST/SP: abcd/abcd
A123456N	ST/SP: ABCD/TN*E
a123456n	ST/SP: abcd/tn*e



CLSI FORMAT ON



CLSI FORMAT OFF

## CLSI FORMAT

CLSI- Enable library space insertion. If you enable the CLSI format, this option inserts spaces in position 2,7,13of the datastring for use in library systems



# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-23

SYMBOLOLOGIES: ABC-CODABAR, CX- CODABAR

---



ON



**OFF**



SET INSERT DATA\*

## ABC- CODABAR



INSERT DATA -ON



INSERT DATA- OFF

\* The data can any alphanumerics of FULL ASCII Table (GROUP 34-42)(page 52-60)

### REMARK:

ABC-CODABAR (American Blood Commission.).The ABC Code is an acronym for American Blood Commission. This bar code is a variant of the CODABAR Code developed for he use in the blood bank. This Code consists of two bar codes which are decoded in one read cycle. The code is concatenated when the stop character of the first bar code and the start character of the second bar code is a "D ", these two"D "are not transmitted.

---



ON



**OFF**



SET INSERT DATA\*

## CX CODE- CODABAR



INSERT DATA -ON



INSERT DATA- OFF

\* The data can any alphanumerics of FULL ASCII Table (GROUP 34-42)(page 52-60)

### REMARK:

The CX-Code consists of two bar Codes which are decoded in one read cycle, the code is concatenated when the stop character of the first bar code is a C, and the start character of the second bar code is a B. The B and C characters are not transmitted.

# GROUP-23

SYMBOLOLOGIES: ABC-CODABAR, CX- CODABAR

---



ON



**OFF**



SET INSERT DATA\*

## ABC- CODABAR



INSERT DATA -ON



INSERT DATA- OFF

\* The data can any alphanumerics of FULL ASCII Table (GROUP 34-42)(page 52-60)

### REMARK:

ABC-CODABAR (American Blood Commission.).The ABC Code is an acronym for American Blood Commission. This bar code is a variant of the CODABAR Code developed for he use in the blood bank. This Code consists of two bar codes which are decoded in one read cycle. The code is concatenated when the stop character of the first bar code and the start character of the second bar code is a "D ", these two"D "are not transmitted.

---



ON



**OFF**



SET INSERT DATA\*

## CX CODE- CODABAR



INSERT DATA -ON



INSERT DATA- OFF

\* The data can any alphanumerics of FULL ASCII Table (GROUP 34-42)(page 52-60)

### REMARK:

The CX-Code consists of two bar Codes which are decoded in one read cycle, the code is concatenated when the stop character of the first bar code is a C, and the start character of the second bar code is a B. The B and C characters are not transmitted.

# GROUP-24

SYMBOLOLOGIES : CODABAR COUPLING, ADJACENT REQUIRED.



ON



OFF



SET INSERT DATA\*

## CODABAR COUPLING



INSERT DATA -ON



INSERT DATA- OFF

ABC-Codabar and CX-Codabar have certain rules regarding the Stop Character of first bar code and the stop character of Second bar code while in conjunction, while Codabar-Coupling is enabled, the data from any two Codabar bar codes can be coupled into one set of data without any limitations between the Stop character of first bar code and the Start character of second bar code. The Start and Stop characters associated with each bar code each bar code will be sent.

*\*The data can any alphanumerics of FULL ASCII Table (GROUP 34-42)(page 52-60)*

## ADJACENT REQUIRED

If CODABAR ADJACENT is enabled, the scanner will only read two adjacent Codabar bar codes, A single bar code will not be read.



ON



OFF

### NOTES:

1. Both ABC-Codabar and CX-Codabar can be enabled together, except when Codabar-Coupling is also enabled.
2. If ABC-Codabar, CX-Codabar, and Codabar-Coupling are all enabled at same time, the scanner will read only Codabar-Coupling, that is, ABC-Codabar, CX-Codabar will be considered coupling formats.

## SETTING PROCEDURE - SET INSERT DATA

Step 1- Scan SET INSERT DATA.

Step 2- Scan any combination of alphanumeric characters from FULL ASCII TABLE.

Step 3- Scan SET INSERT DATA.

**RESET**



### NOTES:

1. The scanner will beep three times as reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., scan RESET to start again.

# GROUP-25

SYMBOLOGIES: STANDARD & FULL ASCII CODE 39, CODE 32

## STANDARD CODE 39 & FULL ASCII CODE 39



**ENABLE**



DISABLE



**FULL ASCII CODE 39**  
**ENABLE**



FULL ASCII CODE 39  
DISABLE



START / STOP - SEND



LAST DIGIT SUPPRESSED OFF

### NOTE:

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



**DISABLE CDV**



CDV & SEND CD



CDV & NOT SEND CD



MIN LENGTH ( 1 )



MAX LENGTH ( 48 )



**START / STOP Not SEND**



LAST DIGIT SUPPRESSED ON



ENABLE



**DISABLE**



**LEADING SEND**

## CODE 32



LEADING NOT SEND



**TAILING SEND**



TAILING NOT SEND

# APPENDIX

## FULL ASCII ( Code 39 ) NUMERIC TABLE

---



### SETTING PROCEDURE

#### MIN / MAX LENGTH

STEP 1 - Scan: MIN LENGTH/ MAX LENGTH

STEP 2 - Scan : Two digits from Appendix .

STEP 3 - Scan: MIN LENGTH / MAX LENGTH

Please note that when Min Length and / or Max Length are enabled, the scanner will only read bar codes that fall into those length parameters. Bar codes shorter or longer than specified will not be read. The default lengths for these are indicated in parentheses under the Min and Max bar codes for each symbology.

---

#### NOTES:

1. The scanner will beep three times as a reminder that a setting is not yet complete.
2. If you make a mistake, forget a step, etc., Scan RESET to start again.

**RESET** ➔



# GROUP-26

## SYMBOLOLOGIES: UPC-E SYSTEM NUMBER

---

### UPC E0

. H064\$



E ( 0 ) OFF

. H063\$



**E ( 0 ) ON**

---

### UPC E1

. H065\$



E ( 1 ) ON

. H066\$



**E ( 1 ) OFF**

### NOTE:

Most UPC Bar codes lead with 0 number systems, For these bar codes use UPC E(0) Selection, For the bar codes that lead with the 1 number, use UPC(E1) select

---

### UPC-E EXPAND TO UPC-A

. H053\$



ENABLE

. H054\$



**DISABLE**

---

### NOTE:

1. If UPC E EXPAND TO UPC A FORMAT set enabled, The output of UPC-A will be 12 digits.
2. The default output of UPC-A is 12 digits, if UPC-A EXPAND TO EAN13 is enabled, a zero will be added to in front of the bar code.

# GROUP-27

## SYMBOLOGIES FORMATTING: UPC-E

---



**ENABLE**



DISABLE



**LEAD DIGIT SEND**



**LEAD DIGIT NO SEND**



**CHECK DIGIT SEND**



CHECK DIGIT NO SEND

---



+5 ON



**+ 5 OFF**



+2 ON



**+ 2 OFF**

**ADD ON SUPPLEMENT**



ADD A SPACE ON



**ADD A SPACE OFF**



**ADDENDA REQUIRED OFF**



ADDENDA REQUIRED ON

---

### NOTE:

When "addenda required on" is set, the scanner reads bar codes that have addenda only if one or both of "+2 / +5" is on.



# GROUP-28

SYMBOLOGIES FORMATTING: UPC -A

---



**ENABLE**



DISABLE



**LEAD DIGIT SEND**



LEAD DIGIT NO SEND



**CHECK DIGIT SEND**



CHECK DIGIT NO SEND

---

**UPC-A EXPAND  
TO EAN -13**



ENABLE



**DISABLE**

---



+5 ON



**+ 5 OFF**



+2 ON



**+ 2 OFF**

**ADD ON SUPPLEMENT**



ADD A SPACE ON



**ADD A SPACE OFF**



**ADDENDA REQUIRED OFF**



ADDENDA REQUIRED ON

---

**NOTE:**

When "addenda required on" is set, the scanner reads bar codes that have addenda only if one or both of "+2 / +5" is on.

# GROUP-29

## SYMBOLOGIES FORMATTING: EAN 8

---

. H019\$



**ENABLE**

. H020\$



DISABLE

. H021\$



**LEAD DIGIT SEND**

. H022\$



LEAD DIGIT NO SEND

. H023\$



**CHECK DIGIT SEND**

. H024\$



CHECK DIGIT NO SEND

. H029\$



+ 5 ON

. H030\$



**+ 5 OFF**

. H031\$



+ 2 ON

. H032\$



**+ 2 OFF**

## ADD ON SUPPLEMENT

. H043\$



ADD A SPACE ON

. H044\$



**ADD A SPACE OFF**

. H061\$



**ADDENDA REQUIRED OFF**

. H062\$



ADDENDA REQUIRED ON

---

### NOTE:

When “addenda required on” is set, the scanner reads bar codes that have addenda only if one or both of “+2 / +5” is on.

# GROUP-30

SYMBOLOGIES FORMATTING: EAN13 ,ISBN,ISSN,ISMN



**ENABLE**



DISABLE



**LEAD DIGIT SEND**

**EAN-13**



LEAD DIGIT NO SEND



**CHECK DIGIT SEND**



CHECK DIGIT NO SEND



+ 5 ON



**+ 5 OFF**



+ 2 ON



**+ 2 OFF**

**ADD ON SUPPLEMENT**



ADD A SPACE ON



**ADD A SPACE OFF**



**ADDENDA REQUIRED OFF**



ADDENDA REQUIRED ON



**ISBN OFF**

**ISBN**



ISBN ON

## NOTES:

1. When "addenda required on" is set, the scanner reads bar codes that have addenda only if one or both of "+2 / +5" is on.
2. Either ISBN or ISBN will be considered as an extension of EAN-13, If ISSN or ISBN need to be read , EAN13 must be enabled. If ISSN and ISBN need to be read with addenda, EAN13 must be enabled with ADDENDA REQUIRED set to ON.



**ISSN OFF**

**ISSN**



ISSN ON

## NOTE :

Both ISSN and ISBN are the extension codes of EAN-13, If scanner is required to read either ISSN or ISBN, Enable EAN-13 must be enabled. Otherwise the scanner will not able to read the ISSN or ISBN.



**ISMN OFF**

**ISMN**



ISMN ON

# GROUP-31

SYMBOLOLOGIES: EAN/UCC-128, CODE 128, PDF417

---



**ENABLE**



DISABLE



CODE ID ENABLE



**CODE ID DISABLE**

## EAN/ UCC- 128



FUNC 1 CHEAR SEND



**FUNC 1 CHEAR NOT SEND**



DEFINE EAN 128

### NOTES :DEFINE EAN 128

The first FNC1 character is translated to Jc1, and the second FNC1 character is translated to an ASCII <GS> character ( scan from Group 43-45 ). (page61-63)

### String format :

Jc1 DATA CHARACTERS <GS> DATA CHARACTERS

### Setting Procedure:

- 1: Scan DEFINE EAN128.
- 2: Scan ASCII Code (page60)
- 3: Scan DEFINE EAN128.

---

## CODE 128



**ENABLE**



DISABLE



MIN LENGTH ( 5 )



MAX LENGTH ( 48 )

## PDF417



Enable



**Disable**

# GROUP-31

SYMBOLOLOGIES: EAN/UCC-128, CODE 128, PDF417

<Set PDF 417 Code Enable/Disable>

\*.G021\$\*

Step3: Scan one digit Idel time barcode as below.



PDF417 Enable



\*0\*

\*.G022\$\*



**PDF417 Disable**



\*1\*

<Set Scanner 'Idel enter Idel Mode >

Step1: Scan 'Idel On Mode' barcode below.

\*.B026\$\*



Idel Mode On



\*2\*



\*3\*

\*.B027\$\*



Idel Mode Off



\*4\*



\*5\*

Step2: Scan 'Idel Entry Time Mode' Barcode.

\*.B028\$\*



Idel Entry Mode Time  
(1~9Min.)

Idel Mode Off



\*6\*



\*7\*

Step4: Scan 'Idel End Time Mode' barcode.

\*.B028\$\*



Idel End Mode Time



\*8\*



\*9\*

# GROUP-32

DATABAR (RSS), LIMITED FOR CONTACT/PEN TYPE

.NO10\$



Databar-14 / LIMITED  
ENABLE

.NO11\$



**Databar-14 / LIMITED**  
**DISABLE**

.NO12\$



Databar-14 / LIMITED  
CHECK DIGIT SEND

.NO13\$



**Databar-14 / LIMITED**  
**CHECK DIGIT NOT SEND**

.NO24\$



Databar-14 / LIMITED  
PREFIX SEND

.NO25\$



**Databar-14/LIMITED**  
**PREFIX NOT SEND**

.PO24\$



Databar-14 / SET ID

.PO19\$



Databar-LIMITED SET ID

# GROUP-32

## Databar (RSS), LIMITED, EXPANDED

---

. N032\$



Databar -14 ENABLE

. N034\$



Databar -14 CHECK DIGIT SEND

. N036\$



Databar -14 PREFIX SEND

. N038\$



Databar-14 STACKED ENABLE

. P024\$



Databar -14 SET ID

## Databar (RSS-14)

. N033\$



Databar-14 DISABLE

. N035\$



Databar-14 CHECK DIGIT NOT SEND

. N037\$



Databar-14 PREFIX NOT SEND

. N039\$



Databar-14 STACKED DISABLE

. N010\$



Databar-LIMITED ENABLE

. N012\$



Databar -LIMITED CHECK DIGIT SEND

. N024\$



Databar-LIMITED PREFIX SEND

. P019\$



Databar -LIMITED SET ID

## Databar (RSS LIMITED)

. N011\$



Databar-LIMITED DISABLE

. N013\$



Databar-LIMITED CHECK DIGIT NOT SEND

. N025\$



Databar-LIMITED PREFIX NOT SEND

. N026\$



Databar-EXPANDED ENABLE

. N028\$



Databar-EXPANDED STACKED ENABLE

. N030\$



Databar -EXPANDED MIN LENGTH

. P020\$



Databar-EXPANDED SET ID

## Databar (RSS-EXPANDED)

. N027\$



Databar-EXPANDED DISABLE

. N029\$



Databar -EXPANDED STACKED DISABLE

. N031\$



Databar -EXPANDED MAX LENGTH

# GROUP-33

WIRELESS DEVICE MODEL

Operating process : Scan following steps with wireless scanner

Step1

.E031\$



Disconnect wireless

Step2

.E032\$



Pincode setting enter

Step4

\$TX



Enter

Step5

.E033\$



Pincode setting exit

Step3 : Scan numbers below as keyined on your pc



1



2



3



4



5



6



7



8



9



0

## Power Manager Mode Idle/Mode

.B017\$



1 min

.B019\$



5 min

.B018\$



3 min

.B020\$



10 min

▲ Special purpose on this function for contact type.

**Note :**

1. Temperature of charging environment should be in 0°C ~ 40°C.
2. This unit of device uses one cradle with only one host.
3. Default idle mode is 1 min.
4. Concept of operating process on host device and wireless dongle, make sure wireless dongle operated in advance, then make host device to initiate.
5. When host device can't connect with wireless dongle, make host device do nothing 1 min (default) to enter idle mode, then trigger host device to connect with wireless dongle, especially after charged.



# GROUP-33

WIRELESS DEVICE MODEL

## Non-pincode wireless type

[Scanner LED & Beeper Indication]

Scanner LED & Beeper Indication						
scanner		Green LED	Red LED	Blue + Red LED	Beeper	Remark
	initial / hand shacking	-	-	blink	long beep 1 time	-
	finished connection	-	-	-	2 beep 1 time	-
	Standby after connection	-	-	-	-	none any indication for saving power
	not connected	-	-	blink	3 beep 1 time	-
	scanning barcodes under not finished connection	-	-	-	error beep tone	-
	successfully both had read barcode and transmitted	flash 1 time	-	-	beep 1 time	-
	error in reading barcodes	-	-	-	-	only red scan light
	low power	-	flash	-	short beep 5 times every 6 sec. till power exhaust electricity	-

# GROUP-33

WIRELESS DEVICE MODEL

## Non-pincode wireless type

[Scanner LED & Beeper Indication]

		Green LED	Red LED	Blue + Red LED	Beeper	Remark
	power off	-	-	-	-	scan barcode setting of 1 min. / 3 min. / 5 min. / 10 min.
cradle	charging	flash	-	-	-	-
	full charge	on	-	-	-	charge needs 4 hours from 0 to 100%

# GROUP-33

WIRELESS DEVICE MODEL

## Pincode wireless type

[Scanner LED & Beeper Indication]

Scanner LED & Beeper Indication						
scanner		Green LED	Red LED	Orange LED	Beeper	Remark
	initial / hand shacking	-	-	-	short beep 1 time	-
	finished connection	flash	-	-	long beep 1 time	-
	Standby after connection	-	-	-	-	-
	scanning barcodes under not connection	flash 5 times	-	-	error beep tone	-
	successfully both had read barcode and transmitted	flash 1 time	-	-	beep 1 time	-
	error in reading barcodes	-	-	-	-	only red scan light
	low power	flash	-	-	short beep 5 times every 6 sec. till power exhaust electricity	-

# GROUP-33

WIRELESS DEVICE MODEL

## Pincode wireless type

[Scanner LED & Beeper Indication]

		Green LED	Red LED	Orange LED	Beeper	Remark
	power off	-	-	-	-	scan barcode setting of 1 min. / 3 min. / 5 min. / 10 min.
cradle	Not charge	-	on	-	-	-
	charging	flash	on	-	-	-
	finish charge	-	-	on	-	charge needs 4 hours from 0 to 100%

# GROUP-34

FULL ASCII TABLE ( CODE 39 )

---

%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-35

FULL ASCII TABLE ( CODE 39 )

---



# GROUP-36

FULL ASCII TABLE ( CODE 39 )

---



# GROUP-37

FULL ASCII TABLE ( CODE 39 )

---





# GROUP-38

FULL ASCII TABLE ( CODE 39 )

---



# GROUP-39

## FULL ASCII TABLE ( CODE 39 )

---



# GROUP-40

FULL ASCII TABLE ( CODE 39 )

---



# GROUP-41

FULL ASCII TABLE ( CODE 39 )

---



†



v



x



z



}



DEL



u



w



y



|



{



~

# GROUP-42

FULL ASCII NUMERIC TABLE ( CODE 39 )

---



0



1



2



3



4



5



6



7



8



9

# GROUP-43

## FUNCTION CODE TABLE ( CODE 39 )

---



# GROUP-44

## FUNCTION CODE TABLE ( CODE 39 )

---

\$T O



Cursor Right

\$T P



Cursor Left

\$T Q



Cursor Up

\$T R



Cursor Down

\$T S



Page Up

\$T T



Page Down

\$T U



Tab

\$T V



Back Tab

\$T W



Esc

\$T X



Enter

\$T Y



BS

\$T Z



Ins

\$T %K



Del

# GROUP-45

## FUNCTION CODE TABLE ( CODE 39 )

\$T%N



Shift (Left) make \*2

\$T%O



Shift (Left) break

\$T+I



Shift (Right) make

\$T+J



Shift (Right) break

\$T+K



Win (Left) make

\$T+L



Win (Left) break

\$T+M



Win (Right) make

\$T+N



Win (Right) break

\$T%W



Ctrl (Left) make \*3

\$T+A



Ctrl (Left) break

\$T+G



Ctrl (Right) make

\$T+H



Ctrl (Right) break

\$T%L



Alt (Left) make\*1

\$T%M



Alt (Left) break

\$T+E



Alt (Right) make

\$T+F



Alt (Right) break

\$T+O



App

\$T+D



Enter (Numeric Key)

For UK Keyboard Special Character

\$T+B



⌘

\$T+C



£

### Note:

- \*1. "Alt(left)Make" is programmed, please scan "Alt(left)Break" to resume barcode setting.
- \*2. "Shift(left)Make" is programmed, please scan "Shift(left)Break" to resume barcode setting.
- \*3. "Ctrl(left)Make" is programmed, please scan "Ctrl(left)Break" to resume barcode setting.





# GROUP- 46

## TROUBLE SHOOTING

The Ezscan is simple to install and use. Most operational problems can be attributed to:



**INCORRECT INTERFACE CONNECTION**  
**INCORRECT CONFIGURATION SETUP**  
**POOR BAR CODE QUALITY**

### GENERAL PROCEDURES

1. First, make sure the scanner is firmly connected to the host computer, when attached correctly, the scanner will emit one long beep. When the trigger is pressed, LED will flash.
2. Once the power is on, try scanning some sample bar codes from this user's guide. The scanner should beep and the LED should flash to indicate a good read in the default configuration . If reading the bar code does not result in a good read, there may have been a problem with the scanning technique or the interface configuration setting. Reset the scanner to default.
3. If the scanner indicates a good read, but no output of data to the monitor, please check the cabling connect

### KEYBOARD INTERFACES PROBLEMS.

In general, the Keyboard Wedge interface is trouble free, but there still are some things to check in the event of a problem.

#### **Do you have the correct cable?**

Most computers use an XT/AT-compatible keyboard. Be sure you have the proper cable for your computer.

#### **Does the keyboard work?**

Since the keyed-in data from keyboard must pass through the decoder, the cabling connections are correct if the keyboard is functioning.

#### **Can your computer accept the data fast enough?**

Your computer's BIOS has a feature related to keyboard typing speed. Try to set the Intercharacter Delay feature to stimulate the keystroke entry speed.

#### **Does keyboard port supply enough power ?**

Most notebook computers do not supply enough power to the scanner. The symptom of insufficient power is a lower "good read" rate (since there is not enough power to properly support the scanning operation).



# GROUP-47

## TROUBLE SHOOTING

---

### RS232 INTERFACE PROBLEMS

**Once you read bar code, there is no output on the monitor: the symptoms may be caused by:**

1. If the handshaking Have you set the protocol of RS232 like Baud rate, data bits, parity and handshaking etc. of a scanner to match to the PC terminal setting? Solution: reset the above mentioned RS232 protocol of scanner to match to PC protocol.
2. Pls check if the cable pinout assignment of bar code match to the pinout assignment of PC terminal?

**No power supply to scanner;**

1. Do you connect the right power adaptor to the scanner?
2. Does scanner connect the cable with right pinout which match to PC-terminal?

### INTERFACE PROBLEMS

**Are you using the Wand Emulation mode with Code 39 output? If so, is your decoder set to accept Code 39 data?**

Check the scanner's configuration setting to make sure it can accept the bar code symbology you are trying to read.

**Although the cable seems to connect properly, does the scanner not send data to the host computer?**

There are no industrial standards for scanner interface cables, so even if they look alike and have similar connector, they might not be alike. For example, cables for Keyboard Wedge and Wand Emulation are similar, but they are not interchangeable due to different pin assignments. Be sure the cable you are using attaches correctly to the matching connector.

### CONFIGURATION SETUP

**Are you setup for the right Interface?**

Are you set up for the right interface? Did you select the Keyboard Wedge cable but set the scanner for RS-232 or Wand Emulation? Or did you change the Keyboard cable to RS-232 but forget to set the scanner interface to RS-232 as well? Set the scanner to its default settings, then select the correct interface based upon the cable and input you are using.

**Sympton ----The LED lighting is stuck, and no function at all, even triggered the scanner.**

**Solution ---- Set the Scanner to Default condition, and choose the right interfaces**



# GROUP-48

## TROUBLE SHOOTING

---

### **Is the proper symbology enabled?**

Each bar code symbology can be individually enabled or disabled. It is suggested that you enable only those that you will be scanning, thereby eliminating the possibility of misreads from the scanning of other symbologies.

### **Does the selected the bar code symbology configuration match the bar code(s) being read?**

Scanned data from each bar code symbology can be restricted to eliminate the scanning of unused symbologies. The restrictions are individually set for each symbology.

## POOR BAR CODE QUALITY

The third problem area has nothing to do with the scanner, but rather the printed quality of the bar code and/or the scanning technique employed.

### **TOLERANCE OF BAR CODE**

A bar code may have a tolerance. Normally, the tolerances are caused by bar code font software or a printer. Software with a proven reputation should be chosen to generate bar codes. If the printed bar codes are distorted, the scanner might not recognize them.

It is very difficult to get a good read from a poor quality bar code unless it is scanned many times. As the quality of the symbology drops, the chances for undetected error increase. A bar code Check Digit Verification (CDV) should be used to check the quality of the suspect bar codes.

### **LABELS ( PAPER & COLOR & PRINTER )**

The light source of a bar code scanner is generally red, so there are some restrictions for the printing of labels. Care should be taken when choosing materials, especially color inks and papers. Sometimes the combination of the label color and the color of the ink can, in effect, blind the scanner. Media with a shiny surface will also cause reading difficulties for scanners.

Moreover, poor printing quality can also result in reading difficulties for the scanner. Bad printing may be caused by the type of printer used; dot matrix and inkjet printers will not produce high quality bar codes. Also check to make sure the ink, ribbon, or toner in good supply.

# APPENDIX 1

## DEFAULT TABLE 1

CROUP	PARAMETER	DEFAULT	
1	Computer Type	PC-AT	
	Interfaces		
	Scan speed		
2	Reading Mode	Trigger	
3	Beep Tone Mode 2.1k	Beep Medium	
	Beep Tone Mode 2.7k	Beep Medium	
	Capital lock Mode	Caplock Off	
4	Setup code read	Setup up code on	
	Preamble & Postamble	OFF	
5	Accuracy Adjustment	2	
6~9	Enable & Disable Code ID	OFF	
10	Interblock Delay	0ms	
	Inter-character Delay	140us	
11	Keyboard Layout	English(USA)	
	Terminator	CR, CR+LF	
	numeric key		
12	Baud Rate	9600	
	Data Bits & Parity	8 Bit None	
13	Stop Bits	1 stop bit	
	Handshaking	None	
	ACK/NAK	OFF	
	Flow Control TimeOut	1 Sec	
14	Level dutation of Mini Width	200us	
	Polarity Of Idle Condition	High	
	Output of Wand Emulation	Bar High/Space Low	
	Wave Form	Full ASCII 39	
15~16	Enable and Disable Symbologies		
	Code 32	Disable	
	China Postal Code	Enable	
	UK Plessy Code	Disable	
	Industrial 2 of 5	Disable	
	Matrix 2 of 5	Disable	
	Interleaved 2 of 5	Enable	
	Code 128	Enable	
	Cadabar	Enable	
	Telepen	Disable	
	UPC-A	Enable	
	UPC-E	Enable	
	EAN-8	Enable	
	EAN-13	Enable	
	MSI	Disable	
	Code 39	Enable	
	Code 11	Enable	
Code 93	Disable		
EAN-128	Enable		
IATA	Disable		
17	1	China Post Code	
		Enable/Disable	Enable
		Check Digits	Disable CDV
		Min Length	11 digits
		Max Length	48 digits
18	1	MSI	
		Enable/Disable	Disable
		Check Digits	CDV & send CD
		Check Digits Mode	Single MOD 10

\* The interface setting of scanner does not have certain default value, the default of interface of scanner will be set according to customer order.

# APPENDIX 1

## DEFAULT TABLE 2

CROUP		PARAMETER	DEFAULT
18	2	<b>UK Plessey</b>	
		Enable/Disable	Disable
		Check Digits	CDV & not send CD
19	1	<b>IATA</b>	
		Enable/ Disable	Disable
		Check Digits	Disable CDV
		Min Length	6 digits
		Max Length	48 digits
	2	<b>Code 93</b>	
		Enable/Disable	Disable
		Min Length	6 digits
		Max Length	48 digits
	3	<b>Telepen</b>	
		Enable/Disable	Disable
		Telepen ASCII /Number	Number
20	1	<b>Interlvened 2 of 5</b>	
		Enable/Disable	Enable
		Check Digits	Disable CDV
		First/ last digit suppressed	No suppressed
		Min Length	6 digits
		Max Length	48 digits
	2	<b>Code II</b>	
		Enable/Disable	Disable
		Check Digits	Disable CDV
		Min Length	6 digits
		Max Length	48 digits
	21	1	<b>Industrial 2 of 5</b>
Enable/Disable			Disable
Check Digits			Disable CDV
Min Length			6 digits
Max Length			48 digits
2		<b>Matrix 2 of 5</b>	
		Enable/Disable	Disable
		Check Digits	Disable CDV
		Min Length	6 digits
		Max Length	48 digits
22	1	<b>Codabar</b>	
		Enable/Disable	Enable
		Check Digits	Disable CDV
		Min Length	6 digits
		Max Length	48 digits
		ST/SP;Abcd/abcd,abcd/tn*c, ABCD/ABCD,ABCD/TN*C	ABCD/ABCD
		Start(ST)/Stop(SP)send	Send
CLSI Format	ON		
23	1	<b>ABC-Codabar</b>	
		ON/OFF	OFF
		Insert Data	OFF
	2	<b>CX-Codabar</b>	
		Insert Data	OFF
	ON/OFF	OFF	
24		<b>Codabar-Coupling</b>	
		ON/OFF	OFF
		Insert Data	ON
		Adjacent Required	OFF
25		<b>Code 39</b>	
		Full ASCII 39 Enable/Disable	Enable
		Check Digits	Disable CDV
		Start/Stop	Not Send
		Min Length	1 digits
		Max Length	48 digits
		<b>Cobe 32</b>	
		Enable/Disable	Disable
Leading send/not send	send		
Tailing send / Tailing not send	Tailing send		

# APPENDIX 1

## DEFAULT TABLE 3

CROUP	PARAMETER	DEFAULT	
26	<b>UPC-E systems number</b>		
	UPC E(0) On/Off	ON	
	UPC E(1) On/Off	OFF	
	UPC-E expand to UPGA	Disable	
27	<b>UPC-E</b>		
	Enable/Disable	Enable	
	Check Digits	Send	
	Lead Digits	Send	
	Add a space	OFF	
	Addenda required	ON	
	+5 On/Off	OFF	
+2 On/Off	OFF		
28	<b>UPC-A</b>		
	Enable/Disable	Enable	
	Check Digits	Send	
	Lead Digits	Send	
	Add a space	OFF	
	Addenda required	ON	
	+5 On/Off	OFF	
+2 On/Off	OFF		
29	<b>EAN-8</b>		
	Enable/Disable	Enable	
	Check Digits	Send	
	Lead Digits	Send	
	Add a space	OFF	
	Addenda required	ON	
	+5 On/Off	OFF	
+2 On/Off	OFF		
30	<b>EAN-13</b>		
	Enable/Disable	Enable	
	Check Digits	Send	
	Lead Digits	Send	
	Add a space	OFF	
	Addenda required	ON	
	+5 On/Off	OFF	
	+2 On/Off	OFF	
	ISSN On/Off	OFF	
ISBN	OFF		
31	1	<b>EAN/UCC128</b>	
		Enable/Disable	Enable
		Code ID	Disable
		Func I Char send	Not Send
	2	<b>Code 128</b>	
		Enable/Disable	Enable
		Check Digits	Disable CDV
		Min Length	5 digits
		Max Length	48 digits
	3	PDF417	Disable
32	<b>Rss-14</b>		
	Rss-14 Check digit	Not Send	
	Rss-14 Prefix	Not Send	
	Rss-14 Stacked	Enable	
	Rss-Limited	Disable	
	Rss-Limited Check Digit	Not Send	
	Rss-Limited Prefix	Not Send	
Rss-Expanded	Disable		

# Appendix 2

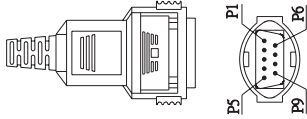
## Cable Pin Assignment

### INTERFACES:

#### 1. TTL , Wand Emulation

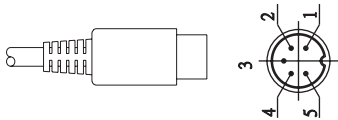
1.1 ) AMP ( D-Sub 9Pin ):

Pin	Signal
2	Data
7	GND
9	+5VCC



1.2 ) Din 5 male ( 240 degree):

Pin	Signal
1	+ 5Vcc
2	Data
3	GND
4	N/A
5	N/A

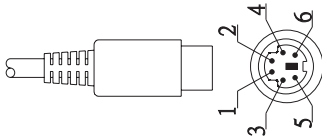


#### 2. Keyboard Interface:

Type of connector:

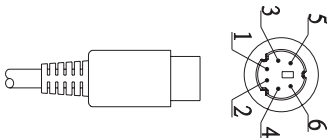
2.1 ) PS/2 Mini Din6 Female:

Pin	Signal
1	PC Data
2	NC
3	GND
4	+5Vcc
5	PC-Clk
6	NC



2.2 ) PS/2 Mini Din6 Male:

Pin	Signal
1	KB- Data
2	NC
3	GND
4	+5Vcc
5	KB-CLK
6	NC



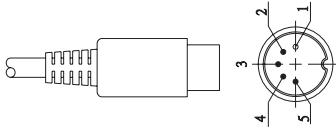
# Appendix 2

## Cable Pin Assignment

Type of connector:

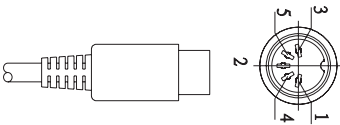
2.3) PC-AT : Din 5 Male :

Pin	Signal
1	KB-Clk
2	KB-Data
3	NC
4	GND
5	+5VCC



2.4) PC-AT : Din 5 Female

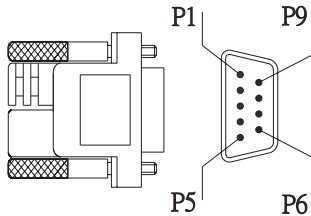
Pin	Signal
1	PC-Clk
2	PC-Data
3	NC
4	GND
5	+5VCC



### 3.RS232 Interfaces:

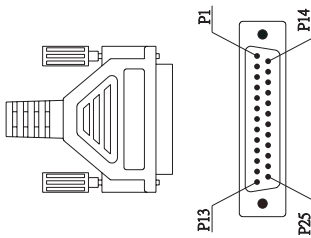
3.1) DB9F

Pin	Signal
2	TXD(Out)
3	RXD(In)
5	GND
7	CTS(In)
8	RTS(Out)
9	+5Vcc



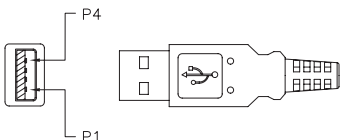
3.2) DB25F

Pin	Signal
2	RXD (In)
3	TXD (out)
4	CTS (In)
5	RTS (Out)
7	GND
16	+5VCC
25	+5VCC



### 4.USB.Interface:

Pin	Signal
1	+5VCC
2	Data -
3	Data +
4	GND





# Appendix 3

## BAR CODE TEST CHART

DENSITY	NARROW mm(mil)	WIDE mm(mil)	CHAR.GAP mm(mil)	N/W RATIO
MEDIUM DENSITY	0.25(10)	0.625(25)	0.25(10)	1/2.5

### MEDIUM DENSITY

NW-7  
(CODABAR)



b-\$/+.00123B

CODE-39



CODE-39 TEST

Interleaved  
2of5



9876543210

UPC



EAN



# Appendix 3

## BAR CODE TEST CHART

DENSITY	NARROW mm(mil)	WIDE mm(mil)	CHAR.GAP mm(mil)	N/W RATIO
MEDIUM DENSITY	0.25(10)	0.625(25)	0.25(10)	1/2.5

### LOW DENSITY



C9876543210D



CODE-39 TEST



0012345690



4 7 1 6 4 1 5 9 4 2 0 5 2



0 7 1 5 8 9 8 1 2 3 0 8

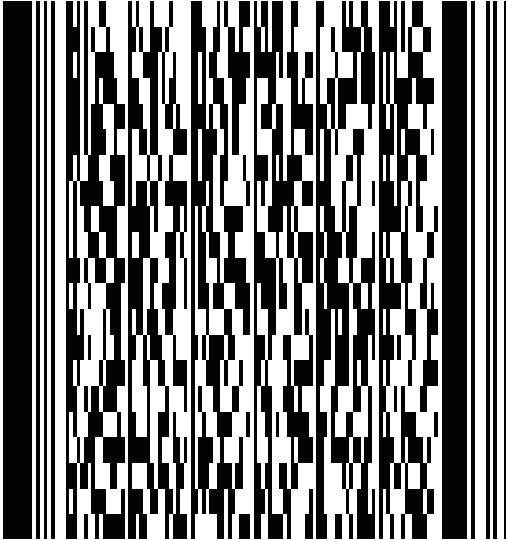
# Appendix 4

## PDF417 Demo Chart

---

LVx: The Database data source contains a list of variables created as and when you need them. These variables are fed by data from queries or ASCII tables.

LV1:

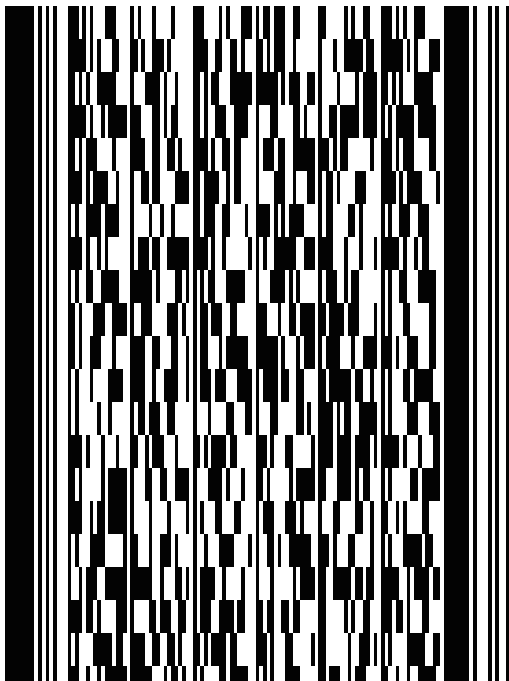


# Appendix 4

PDF417 Demo Chart

---

LV2:

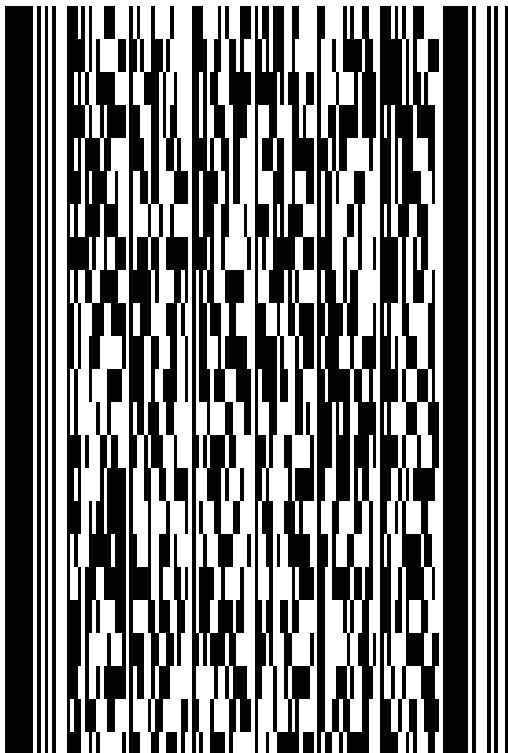


# Appendix 4

PDF417 Demo Chart

---

LV3:

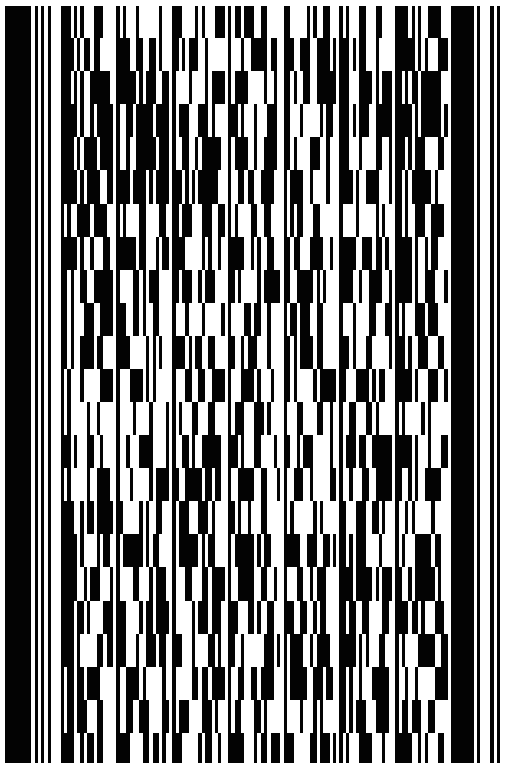


# Appendix 4

PDF417 Demo Chart

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LV4:

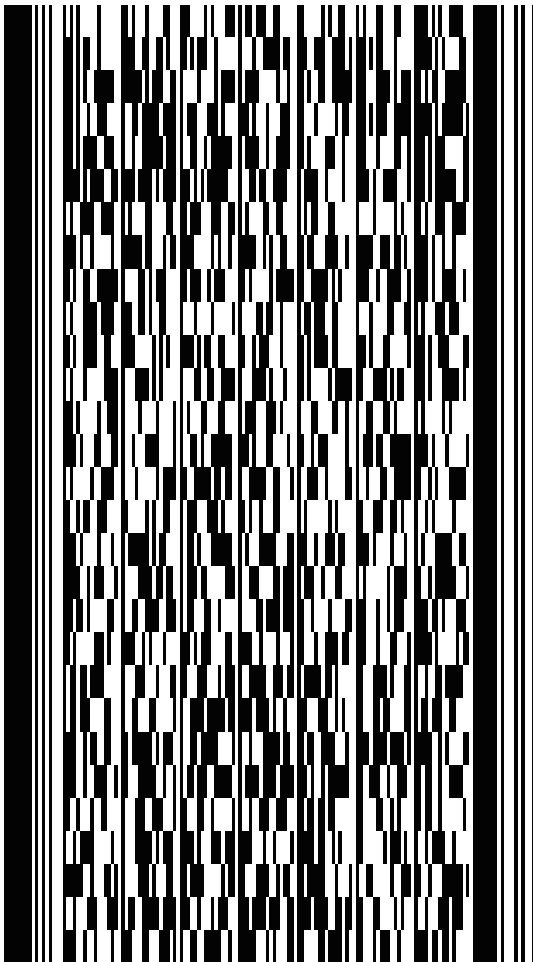


# Appendix 4

PDF417 Demo Chart

---

LV5:

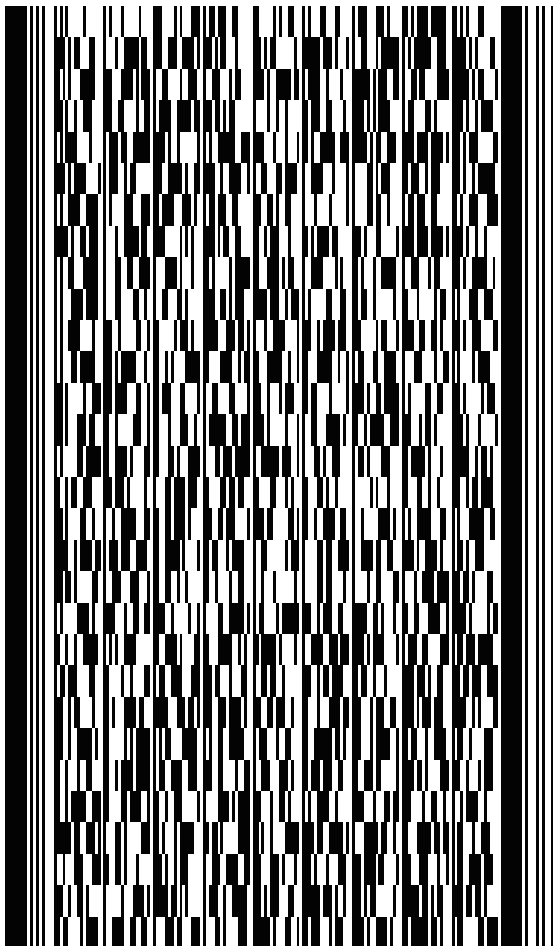


# Appendix 4

PDF417 Demo Chart

---

LV6:



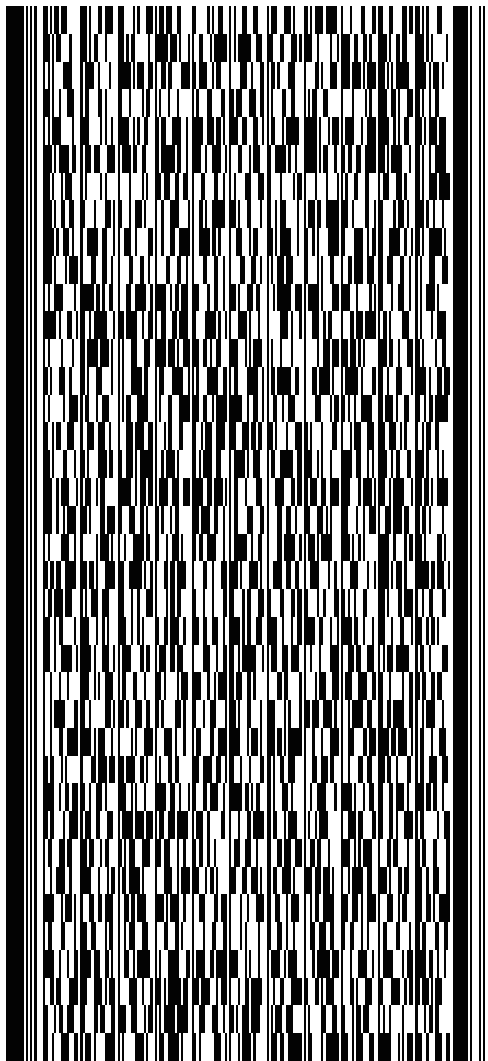


# Appendix 4

## PDF417 Demo Chart

---

LV7:

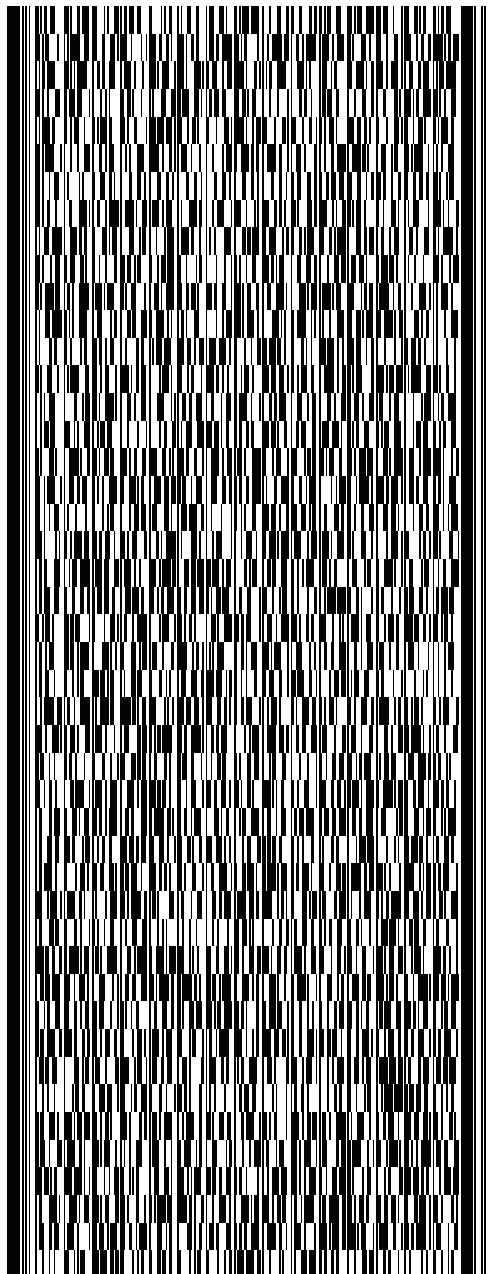


# Appendix 4

## PDF417 Demo Chart

---

LV8:



## Appendix 5

### Auto Sensing Mode for Laser scanner with Infrared Sensor

---

.F010\$



Auto Sensing mode (IR)  
Enable For Laser Scanner

Default :

1. Scanner is required to place on MT709-1 stand for work.
  2. When a object arise in front of window of the scanner, the scanner will scan automatically.
- 

Delay time mode, when there was no symbology  
decoding

.F030\$



Default 3 sec.  
Setting range 01~30 sec.

When scanning light arisen and there was no barcode decoded for 3 sec.(default), then turn off scanning light automatically.

E.g.. If you want set up "Delay time mode, when there was no symbology decoding" to 10 sec.

Scan ".F030\$" → Scan "1" →  
Scan "0" → Scan ".F030\$"

.F030\$



1



0



.F030\$



## Appendix 5

### Auto Sensing Mode for Laser scanner with Infrared Sensor

---

Delay time mode lingering on the same barcode

.F031\$



Default 30 sec.

Setting range 03~60 sec.

After a barcode was decoded, the scanning light still linger on it for 30 sec.(default), then turn off scanning light automatically.

E.g.. If you want set up "Delay time mode lingering on the same barcode" to 10 sec.

Scan ".F031\$" → Scan "1" →  
Scan "0" → Scan ".F031\$"

.F031\$



1



0



.F031\$



# Appendix 5

## Auto Sensing Mode for Laser scanner with Infrared Sensor

---

Use magnetic sensor for stand setting

.F034\$



Stand with magnetic enable

\*The scanner is required place on MT709-1 stand to enable auto sensing mode. Once scanner remove from the MT709-1 stand, then the scanner change to be trigger mode.  
(MT709-1 stand with magnetic)

.F035\$



Stand without magnetic disable

\*Either place scanner on MT709-1 stand or remove scanner from MT709-1 stand, the scanner still is under auto sensing mode.

### Time setting codes



0



1



2



3



4



5



6



7



8



9

# Appendix 6

## Auto Sensing Mode for CCD scanner with Infrared Sensor

---

.F007\$



Auto Sensing mode (IR)  
Enable For CCD Scanner

Default :

1. Scanner is required to place on MT709-1 stand for work.
  2. When Autosensing mode is on, both Green LED and Magnetic switches will be on automatically.  
(Green LED ON +Magnetic switch ON).
  3. When similar symbologies arise in front of window of the scanner, the scanner will scan automatically.
- 

Delay time mode, when there was no symbology decoding

.F030\$



Default 3 sec.  
Setting range 01~30 sec.

When scanning light arisen and there was no barcode decoded for 3 sec.(default), then turn off scanning light automatically.

E.g.. If you want set up "Delay time mode, when there was no symbology decoding" to 10 sec.

Scan ".F030\$" → Scan "1" →  
Scan "0" → Scan ".F030\$"

.F030\$



1



0



.F030\$



## Appendix 6

### Auto Sensing Mode for CCD scanner with Infrared Sensor

---

Use magnetic sensor for stand setting

.F034\$



Stand with magnetic enable

\*The scanner is required place on MT709-1 stand to enable auto sensing mode. Once scanner remove from the MT709-1 stand, then the scanner change to be trigger mode.

(MT709-1 stand with magnetic)

.F035\$



Stand without magnetic disable

\*Either place scanner on MT709-1 stand or remove scanner from MT709-1 stand, the scanner still is under auto sensing mode.

# Appendix 6

## Auto Sensing Mode for CCD scanner with Infrared Sensor

---

Green LED illumination light ON:

.F032\$



Green LED on

.F033\$



Green LED off

Green LED light is enhanced the sensitivity of Autosensing mode. If Green LED is on, the sensitivity of Autosensing will be more sensitive.

### Time setting codes



0



1



2



3



4



5



6



7



8



9