# Ez One Shot®

# BAR CODE SCANNER USER'S MANUAL



Version:2007

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## GENERAL



## SETTING GROUP(GROUP1~14)



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## FULL ASCII(CODE39)TABLE,FUNCTION CODE TABLE(GROUP34~48)



## APPENDIX

# 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 ragged 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 to180mm,**
**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 thereis 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).

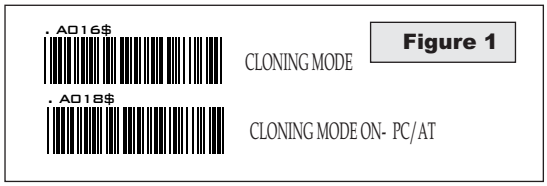

If these steps do not resolve the problem, please refer to the troubleshooting table on the next page. If this fails to correct the problem, please consult the troubleshooting section beginning on page 64~66 for further assistance.

| | | | Figure 2 |
|---|---|---|---|
| **No** | **Kind of Troubles** | **Symptoms** | **Solutions** |
| 1 | Computer Type<br>( Group 1) | Scanner seems to be performing as usual, but no data is being output. | 1. Unplug the cable from the host computer.<br>2. Plug the cable back into the host computer.<br>3. Set the scanner to the exact computer type immediately. |
| 2 | Interfaces Selections<br>( Group 1) | The scanner does not scan when the trigger is depressed. | 1. Unplug the cable from the host computer.<br>2. Plug the cable back into the host computer.<br>3. Set the scanner to the correct interface. Thecable needs to match the interface. |
| 3 | Setting Procedure have not completed ( Setting Need Triple Shot scanning )<br>---<br>Group - 4,5,8,9, 17, 18, 19,20,22,23,25, 31 | 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:<br>1. Preamble, Postamble (Group 4)(page 14)<br>2.Accuracy Adjustment (Group 5)(page 15)<br>3. Customer ID Configuration (Groups 8 and 9)(page 18-19)<br>4. Min/Max Length (Groups 17, 18, 19, 20, 21, 22, 25)<br>5. ABC Codabar (Groups 22 )<br>6. CX-Codabar (Groups 22 and 23)<br>7. Coupling Codabar (Groups 22 and 23)<br>8. EAN 128 (Group 31) | 1. Follow the procedures for these settings at the appropriate pages.<br>2. The scanner will beep three times for an incomplete setting.<br>3. Scan RESET to try a setting again. |
| 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 Comunication 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, andParity. 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.

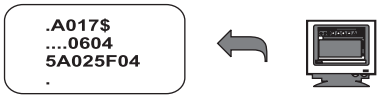
XXXX Stand for any String

**EXAMPLE :**

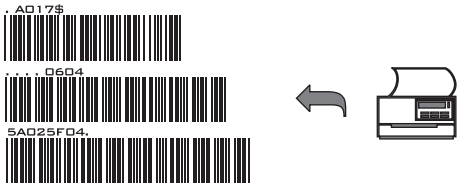
**1. PROJECT ASSIGNMENTS :**
1.1. Beep tone: **BEEP LOW -- HIGH** .
1.2. Capslock Mode: **CAPSLOCK ON ( FIXED )**.
1.3. Reading Mode: **CONTINUOUS AUTO OFF.**

**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$ | |
| .... | 4 |
| 0604 | 4 |
| 5A02 | 4 |
| 5F04 | 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 rows, Do not break the "...." Into multiple string.

| | |
|---|---|
| .A017$ | ✓ |
| ....06045 | 9 x |
| A025F04 | 7 x |
| . | . (Dot) ✓ |

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

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

***Wrong Setting Because you add " ...." After .A017$***
The 0.A17$ is a FIXED parameter for setup entering. It is an unchangeable parameter. **Never adds, delete or rearrange data from the FIRST row.**

# 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.

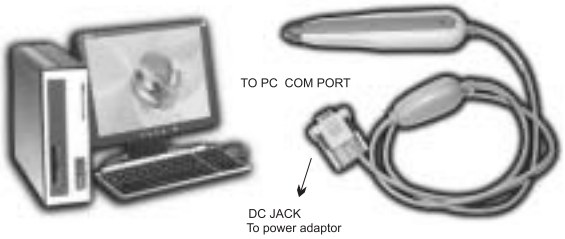
### USB INTERFACES

The USB Interface 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 (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 (page11) (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:**

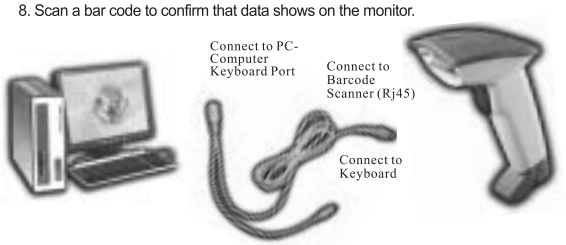
1. Before plugging the power adaptor into the wand, be sure the voltage, power consumption, and inner and outer DC characteristics are correct to avoid serious damage to the wand and/or the computer.

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

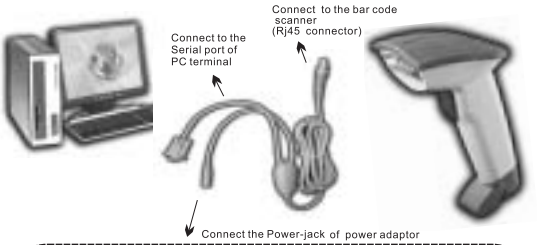
1. Power down the host computer.
2. Disconnect the keyboard cable from the computer.
3. Connect the "Y" cable between the keyboard and the scanner and the computer.
4. Restart the computer.
5. The scanner will beep.
6. Set the scanner to KEYBOARD interface by referring to GROUP 1 (page11) (Interface 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.

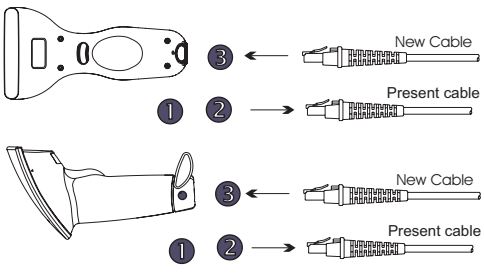
1. Connect the USB cable between the scanner and the computer.
2. The scanner will beep.
3. The Scanner will detect the USB driver automatically. (The first time the scanner is connected via the USB port, follow the appropriate instructions for the host computer.)
4. Set the scanner to KEYBOARD/USB interface 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 resetthe interface setting as appropriate (including parameter settings for the RS-232 interface).



# 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 setting will have been defined or updated into the memory processor.

   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. They are:

SETTING BAR CODE

**Preamble / Postamble (maximum 16 digits)**
Step 1: Scan CLR PRE/POSTAMBLE.
Step 2: Scan PREAMBLE or POSTAMBLE..
Step 3: Scan any alphanumeric from Full ASCII Table in Groups 34 - 45. (page52-63)
Step 4: Scan PREAMBLE or POSTAMBLE.

**Min Length / Max Length**
Step 1: Scan MIN LENGTH or MAX LENGTH.
Step 2: Scan two digits from Group 42 (page60)
Step 3: Scan MIN LENGTH or MAX LENGTH.

**Accuracy Adjustment**
Step1: Scan ACCURACY ADJUSTMENT.
Step 2:Scan one digit from Group 42 (page60)
Step 3:Scan ACCURACY ADJUSTMENT.

**Customer Configuration ID ( Example: Code 39 )**
Step 1: Scan CODE 39 SET ID from Group 8. (page18)
Step 2: Scan either one digits or two digits alphanumeric (maximum 2 digits) from Full ASCII table In Groups 34 - 45. (page52-63)
Step 3: Scan CODE 39 SET ID from Group 8.(page18)

**Set A Data - ( CX-Codabar, ABC Codabar, Codabar Coupling).**
Step1: Scan SET A DATA.
Step 2:Scan one digits any alphanumeric character from Full ASCII Table in Groups 34 - 45.(page52-63)
Step 3: Scan SET A DATA.

**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 CLEAR to start again.

RESET

# GROUP-1

**INTERFACES SELECTION, COMPUTER TYPE, DEFAULT, SCAN SPEED.**

## DEFAULT


## COMPUTER TYPE

MAC ADB

NOTEBOOK*

| SYMPTOMS | SOLUTION |
|---|---|
| Scanner seems to be performing as usual, but no data is being output. | 1. Unplug the cable from the host computer.<br>2. Plug the cable back into the host computer.<br>3. Set the scanner to the exact computer type immediately. |

**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.**

## INTERFACES SELECTION

KEYBOARD& USB

RS232

WAND

| SYMPTOM | SOLUTION |
|---|---|
| The wand does not scan/ The scanner does not scan when the trigger is depressed. | 1. Unplug the cable from the host computer.<br>2. Plug the cable back into the host computer.<br>3. Set the wand to the correct interface. The cable needs to match the interface. |

**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

AMIC 45 Scan

AMIC 90 Scan

*** For AMIC Modle**

# GROUP-2

## READING MODE SETTING


CONTINUOUS MODE

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


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.
*The trigger does not function in Flash Mode.


**TRIGGER MODE**

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


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.


TOGGLE MODE

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


*AUTO SENSING MODE

* If Auto-Sensing (Triggerless) Mode is on, the LED will go off if the scanner does notdetect a bar code.
* The LED lights automatically when a bar code is detected.


*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.


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

2.1KHz

.F019$

BEEP HIGH

.F021$

BEEP HIGH--LOW

.F018$

**BEEP MEDIUM**

.F020$

BEEP LOW--HIGH

.F022$

BEEP LOW

2.7KHz

. F012$

OFF

. F014$

BEEP HIGH

. F016$

BEEP HIGH--LOW

. F013$

**BEEP MEDIUM**

. F015$

BEEP LOW--HIGH

. F017$

BEEP LOW

## 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

.B015$

SETUP CODE ON

.B016$

SETUP CODE OFF * 1

**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 )

.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.

**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 to16 characters added to the end of a scanned bar code.
3. Default value for either: None.