Ez One Shot®

BARCODE SCANNER USER'S MANUAL

DEFAULT

CHECK VERSION

Version:2007

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).

`. 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.
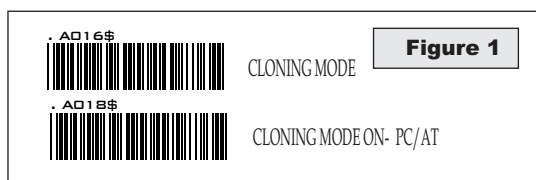
CLONING MODE

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.

| . A016$ (barcode) | CLONING MODE | **Figure 1** |
| . A018$ (barcode) | CLONING MODE ON- PC/AT | |

*.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.

```
.A017$
....0604
5A025F04
.
```

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.

```
. A017$
.... 0604
5A025F04.
```
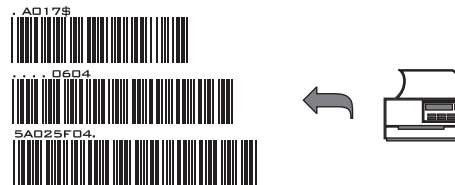
5. Scan these labels with any of the wands that must be
   programmed with the same settings as the first wand. Be sure
   to scan from the first row to the second and so on sequentially,
   top to bottom.

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
A025F04
.
```
✓
9 x
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$....
0604
5A02
5F04.
```
X ←
4 ✓
4 ✓
4+.(Dot) ✓
≪ *Wrong Setting Because you add
" ...." After .A017$*
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.**

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.
*The trigger does not function in Flash Mode.

. 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 notdetect
  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.

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GROUP-3

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

SEND DATA LENGTH

.D019$

SEND DATA LENGTH ON

.D020$

SEND DATA LENGTH OFF

GROUP-4

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.

GROUP-5

0

1

2

3

4

5

6

7

8

9

ACCURACY ADJUSTMENT

. A010$

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 standardof 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

. P023$

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)

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	]E0	4 563987 123453 12411
Preamble	CODE ID	BARCODE / DATA
145287	AIM ID :]E0	EAN 13 +5

OUTPUT   : 145287]E0456398712345312411

GROUP-7

SYMBOLOGIES 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
EAN-13(+2/+5 OFF)	F	]E0	Full ASCII Code 39(CDV & not send CD)		]A7
EAN-13(+2 ON)		]E3	Standard Code 39(disable CDV)	M	]A0
EAN-13(+5 ON)		]E3	Standard Code 39(CDV & send CD)		]A1
Code 93	L	]G0	Standard Code 39(CDV & not send CD)		]A3
Code 11(disable CDV)	J	]H0	IATA 2 of 5	R	]R0
Code 11(send one CD)		]H0	Industrial 2 of 5	V	]S0
Code 11(send two CD)		]H1	China Post Code	H	]X0
Code 11(not send CD)		]H3	Interleaved 2 of 5(CDV & send CD)	I	]I1
Telepen(ASCII)	U	]B0	Interleaved 2 of 5(CDV & not send CD)		]I3
Telepen(Numeric)		]B1	Interleaved 2 of 5(disable CDV)		]I0

SET ID - SETTING PROCEDURES

Settting 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

. 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

China Post Code
[TOSHIBA Code] Set ID

. P012$

MSI Code Set ID

. P014$

UK Plessy Set ID

. P015$

Matrix 2 of 5 Set ID

. P017$

Interleaved 2 of 5
Set ID

. P006$

Industrial 2 of 5 Set ID

. P018$

Full ASCII Code39
Set ID

. P008$

RSS 14/LIMITED

. P019$

RSS-Expand Set ID

. P020$

RSS-14 Set ID

. P024$

LABEL Code Set ID
(Reserved)

. P020$

RESET

. P023$

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$

0mS

. B002$

10mS

. B003$

50mS

. B004$

100mS

. B005$

200mS

. B006$

500mS

INTERCHARACTER DELAY

. B010$

140uS

. B011$

500uS

. B012$

1mS

. B013$

4mS

. B014$

16mS

GROUP-14

. 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