Ez One Shot®

WIRELESS RING BARCODE SCANNER USER'S MANUAL

Version: 2018.1

CONTENTS

LED & BEEPER INDICATION

	Status	Green LED	Blue LED	Red LED	Beeper
Scanner	Successful Barcode Scan	1 Flash			1 beep
	Successful Connection	2 Flashes			2 beeps
	Reads Configuration Barcode	1 Flash			2 beeps
	Barcode Scan in Memory Mode	1 Flash			1 beep
	Wireless Disconnection	3 Flashes			3 beeps
	Unexpected Barcode Scan during Configuration	1 Flash			3 short beeps
	Memory Full	1 Flash			3 short beeps
	Barcode Scan while Disconnected	1 Flash			3 short beeps
	Poor Connection (Out of Range)	1 Flash			4 beeps (Hi-Lo-Hi-Lo)
	Low Power			Flashing	5 beeps
	Bluetooth Discoverable		Flashing		
	Power Off or Standby				

CLONING MODE

WHAT IS CLONING MODE?

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

HOW SHOULD CLONING WORK?

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

Figure 1

CLONING MODE

NOTES:

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

FORMAT OF CLONING

* Format of Cloning:

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

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

3rd row ~ so on >>> XXXX

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

XXXX Stands for any string

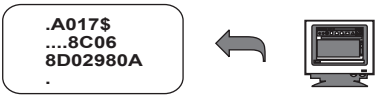
CLONING MODE

EXAMPLE :

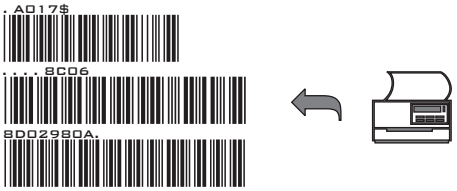
1. PROJECT ASSIGNMENTS:
1.1. Beep tone: **BEEP LOW.**
1.2. Capslock Mode: **CAPSLOCK ON.**
1.3. Reading Mode: **CONTINUOUS AUTO OFF.**

2. SETTING PROCEDURE:
2.1. Scan **BEEP LOW (GROUP 3).**
2.2. Scan **CAPSLOCK ON (GROUP 12).**
2.3. Scan **CONTINUOUS MODE (GROUP2).**

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



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



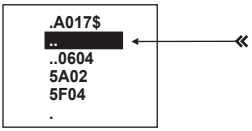
5. Scan from the first row to the second and so on sequentially, top to bottom, with the scanner you wish to "clone" these settings to.

CORRECT SETTING

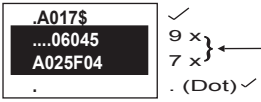
.A017$	
....	4
0604	4
5A02	4
5F04	4
.	. (Dot)

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

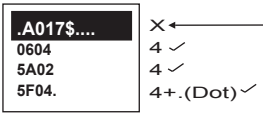
WRONG SETTING



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



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



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

HOW TO SET PARAMETERS

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

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

Default parameters are indicated in bold type and underlined characters. The character font is ARIAL BLACK.

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

Preamble / Postamble (maximum 16 digits)
Step 1: Scan CLR PRE/POSTAMBLE.
Step 2: Scan PREAMBLE or POSTAMBLE.
Step 3: Scan 1 ~ 16 alphanumeric from Full ASCII table (Group 38-49).
Step 4: Scan PREAMBLE or POSTAMBLE.

Min Length / Max Length
Step 1: Scan MIN LENGTH or MAX LENGTH.
Step 2: Scan two digits from Full ASCII table - Numbers (Group 46).
Step 3: Scan MIN LENGTH or MAX LENGTH.

Set Code ID (Example: Code 39)
Step 1: Scan CODE 39 SET ID from Group 8
Step 2: Scan either one or two alphanumerics (maximum 2 digits) from Full ASCII table (Group 40-46)
Step 3: Scan CODE 39 SET ID from Group 8

Set Data Format
Step 1: Scan DATA FORMAT
Step 2: Scan 1 ~ 3 digits from Full ASCII Table - Numbers (Group 46)
Step 3: Scan DATA FORMAT

Set Field Separator
Step 1: Scan FIELD SEPARATOR
Step 2: Scan one alphanumeric character from Full ASCII Table (Group 40-46)
Step 3: Scan FIELD SEPARATOR

Set Date/Time
Step 1: Scan SET DATE/TIME
Step 2: Scan 6 digits from Full ASCII Table - Numbers (Group 46)
Step 3: Scan SET DATE/TIME

Set Date/Time Format
Step 1: Scan SET DATE/TIME FORMAT
Step 2: Scan 2 digits from Full ASCII Table - Numbers (Group 46)
Step 3: Scan SET DATE/TIME FORMAT

NOTES:

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

RESET/ ABORT

GROUP-1

GENERAL SETTINGS

DEFAULT

. A001$

*Reset to factory default

CHECK VERSION

. A007$

*Check firmware version

RESET/ ABORT

. P023$

*Abort multi-step configuration

SETUP CODE READ

.B015$

SETUP CODE ON

.B016$

SETUP CODE OFF

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

FUNCTION CODE CONVERSION

. C019$

ENABLE

. C020$

DISABLE

*Caution: Once disabled, the scanner will output the original encoded data of the barcodes in Full ASCII Table - Function/Navigation/Modifier Keys (Group 47-49).

GROUP-2

GENERAL SETTINGS - READING MODE, BUTTON/ILLUMINATION PREFERENCE

READING MODE

. F005$

CONTINUOUS MODE

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

. F002$

TRIGGER MODE

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

BUTTON PREFERENCE

Scan one of below configuration barcodes to determine which touch-sensing button to enable according to your habit:

. F064$

RIGHT BUTTON ONLY

* Recommended for left-handed user.

. F065$

LEFT BUTTON ONLY

* Recommended for right-handed user.

. F066$

BOTH BUTTONS

ILLUMINATION PREFERENCE

. F059$

LASER ALWAYS ON
LED ON AFTER 1 SEC

. F049$

LASER ALWAYS ON
LED AUTO-ADAPTIVE

. F04B$

LASER ALWAYS ON
LED ALWAYS ON

. F046$

LASER OFF
LED ALWAYS ON

GROUP-3

GENERAL SETTINGS - BEEP TONE, TERMINATOR

BEEP TONE

.F019$

BEEP HIGH

.F022$

BEEP LOW

.F018$

BEEP MEDIUM

. F012$

BEEP OFF

TERMINATOR

. D010$

NONE

. D011$

LF

. D012$

CR

. D013$

CR+LF

. D014$

TAB

. D015$

SPACE

. D016$

ESC

NOTES:

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

3. Below is the position of Terminator among output data string:
[Preamble] [Symbology ID] [Barcode Length] [Barcode Data] [Postamble] ***[Terminator]***

4. By default, with Preamble, Postamble, Barcode Length and Symbology ID disabled, the scanner data output will be:
[Barcode Data] ***[Terminator]***

GROUP-4

SEND DATA LENGTH, PREAMBLE & POSTAMBLE.

SEND DATA LENGTH

.DD19$

SEND DATA LENGTH ON

.DD20$

SEND DATA LENGTH OFF

PREAMBLE & POSTAMBLE (PREFIX AND SUFFIX)

.A011$

CLEAR PRE/ POSTAMBLE

.A012$

PREAMBLE (16)

.A013$

POSTAMBLE (16)

EXAMPLE:

Set PREAMBLE String as " ## "
POSTAMBLE String as " $$ "

SETTING PROCEDURE:

STEP 1 : Scan : CLEAR PRE/ POSTAMBLE.
STEP 2 : Scan : PREAMBLE.
STEP 3 : Scan : " # " twice from Full ASCII Table.
STEP 4 : Scan : PREAMBLE.
STEP 5 : Scan : POSTAMBLE.
STEP 6 : Scan : " $ " twice from Full ASCII Table.
STEP 7 : Scan : POSTAMBLE.

DATA FORMAT:

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

NOTES:

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

GROUP-5

GENERAL SETTINGS - ACCURACY ADJUSTMENT

0

1

2

3

4

5

6

7

8

9

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.

NOTES:

RESET/ ABORT

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

GROUP-6

GENERAL SETTINGS - CODE ID, INVERSE BARCODE

ENABLE INVERSE BARCODE

.D021$

DISABLE INVERSE BARCODE
(READS POSITIVE BARCODE ONLY)

.D022$

ENABLE INVERSE BARCODE
(READS POSITIVE & NEGATIVE BARCODES)

CODE ID / SYMBOLOGY ID

.A008$

FACTORY ID ON

.A014$

AIM ID ON

.A015$

SET ID ON

.A009$

DISABLE CODE ID

NOTES:

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

DATA FORMAT:

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

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

Preamble	CODE ID	BARCODE / DATA
145287	AIM ID :]E0	EAN 13 +5

OUTPUT : 145287]E04563987123453 12411

GROUP-7

GENERAL SETTINGS - SYMBOLOGIES CODE IDENTIFIER

SYMBOLOGIES CODE ID IDENTIFIER					
Symbologies	Factory ID	AIM ID (new)	Symbologies	Factory ID	AIM ID (new)
EAN 128	T	]C1	MSI	O	]M0
Code 128	K	]C0	MSI(MOD 10 / CDV & not send CD)		]M1
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	Interleaved 2 of 5(CDV & send CD)	I	]I1
Code 11(send one CD)		]H0	Interleaved 2 of 5(CDV & not send CD)		]I3
Code 11(send two CD)		]H1	Interleaved 2 of 5(disable CDV)		]I0
Code 11(not send CD)		]H3	Databar	G	]e0
Telepen(ASCII)	U	]B0	Databar Stacked		
Telepen(Numeric)		]B1	Databar Stacked Omnidirectional		
IATA 2 of 5	R	]R0	Databar Truncated		
Industrial 2 of 5	V	]S0	Databar Limited	C	
China Post Code	H	]X0	Databar Expanded	Q	
PDF417	Z	]E0	Databar Expanded Stacked		

SET ID - SETTING PROCEDURES

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).
Step2: "A" from Group 42.
Step3: Scan MSI Set ID (Group 9).

Code 93:
Step1: Scan Code 93 Set ID (Group 8).
Step2: "G" from Group 56, Scan "9" from Group 46.
Step3: Scan Code 93 Set ID (Group 8).

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

GENERAL SETTINGS - SET CODE ID

EAN 13 Set ID

EAN 8 Set ID

UPC E Set ID

UPC A Set ID

Code 39 Set ID

Code 93 Set ID

Codabar Set ID

IATA Set ID

Code 128 Set ID

EAN 128 Set ID

Telepen Set ID

Code 11 Set ID

Code 32 Set ID

China Post Code
(TOSHIBA Code) Set ID

GROUP-9

GENERAL SETTINGS - SET CODE ID

MSI Code Set ID

UK Plessey 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

GS1 Databar (RSS)
Limited Set ID

GS1 Databar (RSS)
Expanded Set ID

GS1 Databar (RSS)
Set ID

LABEL Code Set ID
(Reserved)

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.
4. If you make a mistake, forget a step, etc., and want to abort the multi-step configuration, scan RESET/ABORT and start over from step 1 to step 3 again.

RESET/ ABORT

GROUP-10

GENERAL SETTINGS

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

.B040$  50mS

.B041$  100mS

.B042$  150mS

.B043$  200mS

.B044$  250mS

GROUP-11

GENERAL SETTINGS - KEYBOARD LAYOUT

KEYBOARD LAYOUT

. C010$

ENGLISH (USA)

. C018$

ENGLISH (UK)

. C012$

FRENCH

. C011$

GERMAN

. C014$

ITALIAN

. C013$

SPANISH

. C017$

CZECH (QWERTY)

. C022$

CZECH (QWERTZ)

. C021$

HUNGARIAN (QWERTZ)

. C024$

HUNGARIAN (101 KEY)

. C016$

SWISS (GERMAN)

. C023$

SWISS (FRENCH)

. C009$

JAPAN (106 key)

. C025$

CANADIAN (FRENCH)

. C034$

CANADIAN (TRADITIONAL)

. C029$

NORWEGIAN

. C026$

SWEDISH

. C031$

PORTUGUESE

. C030$

BELGIAN (AZERTY)

. C028$

DUTCH

. C027$

DANISH

. C032$

SLOVAK

. C033$

BRAZILIAN (PORTUGUESE)

. C015$

ALT CODE

GROUP-12

GENERAL SETTINGS -
CAPLOCK MODE, NUMERIC KEY, HT/CR/ESC CONVERSION

CAPITAL LOCK MODE

. A004$

CAPLOCK ON

. A005$

CAPLOCK OFF

. A006$

CAPLOCK FREE

NOTE:

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

NUMERIC KEY

. D017$

NUMERIC KEY

. D018$

ALPHANUMERIC KEY

NOTE:

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

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

. D025$

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

. D026$

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

NOTE:

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

GROUP-13

WIRELESS SCANNER SETTINGS

INTERFACE

. E043$

BT HID / BT SPS

Emulates a **Bluetooth HID keyboard** or a **Bluetooth SPS Device** that transmits each barcode data to the host after decode. Wireless scanner operates in this mode right out of box. Please see next page (Group 14) for details.

. C035$

Memory Mode

Emulates a **USB mass storage device** that saves each barcode data during off-line data collection. See Memory Mode chapter (Group 17-19) for details.

. C008$

USB HID

Emulates a **USB keyboard** that transmits each barcode data to the host after decode. Barcode data is sent via USB cable directly.

. C006$

USB VCP

Emulates a **USB virtual com device** that transmit each barcode data to the host after decode. Barcode data is sent via USB cable directly. For VCP driver, please contact our sales representative or technical support team.

GROUP-14

WIRELESS SCANNER SETTINGS

BT - HID / BT - SPS GETTING CONNECTED

1. Scan [**Disconnect**] to delete previous pairing record. Alternatively, you may long-press the function button for 5 seconds until the the scanner emit two beeps.

. E031$

Disconnect

2. Scan [**BT - HID / BT - SPS**]; the scanner will emit two beeps.

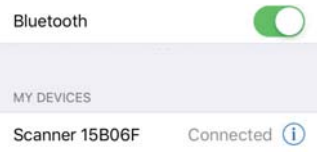
. E043$

BT - HID / BT -SPS

3. Select "Scanner XXXXXX" on the discovered device list from your Bluetooth application. If you use smartphone or PC's built-in Bluetooth application to establish connection, the scanner becomes an HID keyboard device. If you use other Bluetooth serial terminal to establish connection, the scanner becomes an SPS device.

(*Note: "XXXXXX" are the last 6 digits of MAC address which can also be found on the product label)

4. The scanner will emit two beeps to verify the connection.



GROUP-15

WIRELESS SCANNER SETTINGS

BT - HID / BT -SPS SMARTPHONE/TABLET TOUCH KEYBOARD

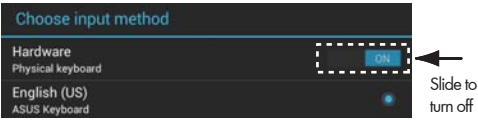
iOS

While connected with the scanner, the Touch Keyboard on the iOS device might disappear. To resolve this issue, please simply press the function button to toggle iOS Touch Keyboard.

Android

While connected with the scanner, the Touch Keyboard on the Android smartphone or tablet might disappear. To resolve this issue, please change settings on Android device with below steps:

1. Enter "Settings"
2. Enter "Language & input"
3. Tap on "Default keyboard"
4. Turn off "Physical keyboard", or Turn on "On-screen keyboard" and the Touch Keyboard will function properly again.



BT - HID / BT - SPS BATCH MODE

Once enabled, Batch Mode allows the scanner to temporarily keep scanned data in its memory buffer (Capacity: 2KB, or approx. 150 EAN-13 barcodes) while it is out of range of the wireless connection. When back in range, the scanner automatically sends all stored data back to the host. Batch Mode is disabled by default.

. E054$

ENABLE

. E053$

DISABLE

WAKE-UP METHOD

You may choose either one of the below options as a means to wake up the scanner.

. F073$

Function Button

. F072$

Trigger Button

GROUP-16

WIRELESS SCANNER SETTINGS

POWER OFF TIMEOUT

Variable Timeout

. B030$

SET MINUTE
(Range: 00 ~ 60)

. B029$

SET SECOND
(Range: 00 ~ 60)

The timeout is 30 seconds by default, and is programmable to the second and minute, ranging from 10 seconds (00:10) to 60 minutes and 60 seconds (60:60)
For example, to set the timeout as 5 minutes 30 seconds:
1. Scan [Set Minute]
2. Scan [0] & [5] on below numeric barcode table.
3. Scan [Set Minute]
4. Scan [Set Second]
5. Scan [3] & [0] on below numeric barcode table.
6. Scan [Set Second]

No Timeout (Scanner Always On)

. B021$

DISABLE
TIMEOUT

Warning! This will cause the battery to drain quickly.

NUMERIC BARCODES

1

2

3

4

5

6

7

8

9

0

WIRELESS SCANNER SETTINGS

MEMORY MODE

. C035$

MEMORY MODE

After scanning the above barcode, the scanner will be able to collect barcode data off-line. The barcode data will be stored in the format of:
< **Date** >, < **Time** >, < **Barcode Data** > < **CR** >

To retrieve stored data, please connect the scanner to the host with cable, access removable storage device "**MiniScan**" from which you may open or copy the file "**BARCODE.txt**" to your computer.

To exit Memory Mode, simply scan any interface barcode in **INTERFACE** section (Group 13)

DELETE LAST RECORD

. R005$

DELETE LAST RECORD

To delete ONE stored data, please scan below barcode or press function button.

CLEAR ALL RECORD

To delete ALL stored data, simply delete the file "**BARCODE.txt**" in the removable storage device "**MiniScan**" until you hear two beeps.

GROUP-18

WIRELESS SCANNER SETTINGS

MEMORY MODE DATA FORMAT

. R011$

DATA FORMAT

The default Data Format for Memory Mode is <Date>, <Time>, <Barcode Data> below are items and their setup codes:

Code	Item	Code	Item
2	Date	4	Barcode Data
3	Time		

Example:
To change Data Format to <Barcode Data>, <Date>, <Time>
1. Scan [Data Format]
2. Scan [4], [2], [3] from Group 46.
3. Scan [Data Format]

. R010$

FIELD SEPARATOR

Default is comma (,) . You may replace it with any alphanumeric characters from the full ASCII table.

Example: To change Field Separator to Semicolon (;)
1. Scan [Field Separator]
2. Scan [;] from the full ASCII table (Group 40-46)
3. Scan [Field Separator]

MEMORY MODE DATE & TIME SETUP

SET DATE

. R006$

Example: To set Date to 2018-08-01 (Year-Month-Day):
1. Scan [Set Date]
2. Scan [1], [8], [0], [8], [0], [1] from Group 46.
3. Scan [Set Date]

SET TIME

. R007$

Example: To set Time to 08:10:30 am (Hr:Min:Sec)
1. Scan [Set Time]
2. Scan [0], [8], [1], [0], [3], [0] from Group 46.
3. Scan [Set Time]

* Full drain of battery may cause the Time and Date to stop. To avoid this, please, please fully charge the scanner for at least 1 hour before use.

GROUP-19

WIRELESS SCANNER SETTINGS

MEMORY MODE DATE FORMAT

. R008$

DATE FORMAT

The default Date Format for Memory Mode is DD/MM/YYYY (Code = 09), below is full list of available formats and their setup codes:

Code	Format	Code	Format
01	DD-MM-YYYY	09	DD/MM/YYYY
02	MM-DD-YYYY	10	MM/DD/YYYY
03	DD-MM-YY	11	DD/MM/YY
04	MM-DD-YY	12	MM/DD/YY
05	YYYY-MM-DD	13	YYYY/MM/DD
06	YY-MM-DD	14	YY/MM/DD
07	DD-MM	15	DD/MM
08	MM-DD	16	MM/DD

Example:
To set Date Format to MM/DD/YY (Code =12)
1. Scan [Date Format]
2. Scan [1], [2] from Group 46.
3. Scan [Date Format]

MEMORY MODE TIME FORMAT

TIME FORMAT

. R009$

The default Time Format for Memory Mode is HH:MM:SS (Code = 01), below are available formats and their setup codes:

Code	Format	Code	Format
01	HH:MM:SS	02	HH:MM

Example:
To set Time Format to HH:MM (Code = 02)
1. Scan [Time Format]
2. Scan [0], [2] from Group 46.
3. Scan [TimeFormat]

GROUP-20

ENABLE/ DISABLE SYMBOLOGIES

ENABLE

. A002$

ENABLE ALL CODE

. K010$

CODE 32

. K001$

CHINA POSTAL CODE

. L010$

UK PLESSEY CODE

. N001$

INDUSTRIAL 2 OF 5

. M010$

MATRIX 2 OF 5

. J001$

INTERLEAVED 2 OF 5

. J010$

CODE 128

. I001$

CODABAR

. L014$

TELEPEN

DISABLE

. A003$

DISABLE ALL CODE

. K011$

CODE 32

. K002$

CHINA POSTAL CODE

. L011$

UK PLESSEY CODE

. N002$

INDUSTRIAL 2 OF 5

. M011$

MATRIX 2 OF 5

. J002$

INTERLEAVED 2 OF 5

. J011$

CODE 128

. I002$

CODABAR

. L015$

TELEPEN

GROUP-21

ENABLE/ DISABLE SYMBOLOGIES

ENABLE

. 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

DISABLE

. 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-22

ENABLE/DISABLE SYMBOLOGIES, CHINA POSTAL CODE

ENABLE

. N032$

GS1 Databar ENABLE

. N038$

GS1 Databar STACKED ENABLE

. N010$

GS1 Databar LIMITED ENABLE

. N026$

GS1 Databar EXPANDED ENABLE

. N028$

GS1 Databar EXPANDED STACKED ENABLE

DISABLE

. N033$

GS1 Databar DISABLE

. N039$

GS1 Databar STACKED DISABLE

. N011$

GS1 Databar LIMITED DISABLE

. N027$

GS1 Databar EXPANDED DISABLE

. N029$

GS1 Databar EXPANDED STACKED DISABLE

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:

RESET/ ABORT

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

GROUP-23

SYMBOLOGIES: MSI CODE, UK PLESSEY CODE

MSI

. L001$

ENABLE

. L002$

DISABLE

. L004$

CDV & SEND CD

. L003$

CDV & NOT SEND CD

. L007$

CHECK DIGIT DOUBLE MOD 10

. L008$

CHECK DIGIT DOUBLE 11 PLUS MOD 10

. L009$

CHECK DIGIT SINGLE MOD 10

. L005$

MIN LENGTH (6)

. L006$

MAX LENGTH (48)

UK PLESSEY CODE

. L010$

ENABLE

. L011$

DISABLE

. 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:

RESET/ ABORT

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

GROUP-24

SYMBOLOGIES: CODE 93, TELEPEN, IATA

CODE 93

. G010$

ENABLE

. G011$

DISABLE

. G012$

MIN LENGTH (6)

. G013$

MAX LENGTH (48)

TELEPEN

. L014$

ENABLE TELEPEN

. L015$

DISABLE TELEPEN

. L020$

TELEPEN ASCII

. L021$

TELEPEN NUMBER

IATA

. N017$

ENABLE

. N018$

DISABLE

. N019$

DISABLE CDV

. N020$

CDV & SEND CD

. N021$

CDV & NOT SEND CDV

. N022$

MIN LENGTH (6)

. N023$

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:

RESET/ ABORT

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

GROUP-25

SYMBOLOGIES: INTERLEAVED 2 OF 5, CODE 11

.J001$

ENABLE

.J002$

DISABLE

.J003$

DISABLE CDV

.J004$

CDV & SEND CD

.J005$

CDV & NOT SEND CD

INTERLEAVED 2 OF 5

.J008$

First digit suppressed

.J009$

Last digit suppressed

.J014$

NO suppressed

.J006$

MIN LENGTH (6)

.J007$

MAX LENGTH (48)

.I010$

ENABLE

.I011$

DISABLE

.I012$

DISABLE CDV

.I013$

CDV & SEND CD

.I042$

CDV & SEND CD
(1 DIGIT)

CODE 11

.I043$

CDV & SEND CD
(2 DIGITS)

.I014$

CDV & NOT SEND CD

.I015$

MIN LENGTH (6)

.I016$

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:

RESET/ ABORT

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

GROUP-26

SYMBOLOGIES: INDUSTRIAL 2 OF 5, MATRIX 2 OF 5

INDUSTRIAL 2 OF 5

. N001$

ENABLE

. N002$

DISABLE

. N003$

DISABLE CDV

. N004$

CDV & SEND CD

. N005$

CDV & NOT SEND CD

. N006$

MIN LENGTH (6)

. N007$

MAX LENGTH (48)

MATRIX 2 OF 5

. M010$

ENABLE

. M011$

DISABLE

. M012$

DISABLE CDV

. M013$

CDV & SEND CD

. M014$

CDV & NOT SEND CD

. M015$

MIN LENGTH (6)

. M016$

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:

RESET/ ABORT

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

GROUP-27

SYMBOLOGIES: CODABAR

.I001$

ENABLE

.I002$

DISABLE

.I005$

DISABLE CDV

.I006$

CDV & SEND CD

CODABAR

.I007$

CDV & NOT SEND CD

.I008$

MIN LENGTH (6)

.I009$

MAX LENGTH (48)

.I030$

ST/SP: abcd/abcd

.I029$

ST/SP: ABCD/ABCD

.I031$

ST/SP: ABCD/TN*E

.I032$

ST/SP: abcd/tn*e

START / STOP

.I003$

SEND START / STOP

.I004$

Not Send 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**

.I027$

CLSI FORMAT ON

.I028$

CLSI FORMAT OFF

CLSI FORMAT

CLSI- Enable library space insertion. If you enable the CLSI format, this option inserts spaces in position 2, 7, 13 of the data string 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:

RESET/ ABORT

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

GROUP-28

SYMBOLOGIES: ABC- CODABAR, CX- CODABAR

ABC- CODABAR

.I017$

ON

.I018$

OFF

.I035$

SET INSERT DATA*

.I039$

INSERT DATA- ON

.I036$

INSERT DATA- OFF

* *The data can be any alphanumerics of FULL ASCII Table (GROUP 40-46)*

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 the 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.

CX CODE- CODABAR

.I022$

ON

.I023$

OFF

.I037$

SET INSERT DATA*

.I040$

INSERT DATA- ON

.I038$

INSERT DATA- OFF

* *The data can be any alphanumerics of FULL ASCII Table (GROUP 40-46)*

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-29

SYMBOLOGIES: 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 will be sent.

* *The data can be any alphanumerics of FULL ASCII Table (GROUP 40-46)*

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 the 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 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-30

SYMBOLOGIES: STANDARD & FULL ASCII CODE 39, CODE 32

STANDARD CODE 39 & FULL ASCII 39

. G008$

ENABLE

. G009$

DISABLE

. G001$

FULL ASCII CODE 39 ENABLE

. G002$

FULL ASCII CODE 39 DISABLE

. G014$

START / STOP - SEND

. G003$

DISABLE CDV

. G004$

CDV & SEND CD

. G005$

CDV & NOT SEND CD

. G006$

MIN LENGTH (1)

. G007$

MAX LENGTH (48)

. G015$

START / STOP Not SEND

NOTE:

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

CODE 32

. K010$

ENABLE

. K011$

DISABLE

. K012$

LEADING SEND

. K013$

LEADING NOT SEND

. K014$

TAILING SEND

. K015$

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:

RESET/ ABORT

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

GROUP-31

SYMBOLOGIES FORMATTING: UPC-E

UPC-E

. H007$
ENABLE

. H008$
DISABLE

. H009$
LEAD DIGIT SEND

. H010$
LEAD DIGIT NO SEND

. H011$
CHECK DIGIT SEND

. H012$
CHECK DIGIT NO SEND

ADD ON SUPPLEMENT

. H037$
+5 ON

. H038$
+ 5 OFF

. H039$
+2 ON

. H040$
+ 2 OFF

. H047$
ADD A SPACE ON

. H048$
ADD A SPACE OFF

. H056$
ADDENDA REQUIRED ON

. H055$
ADDENDA REQUIRED OFF

NOTE:

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

GROUP-32

SYMBOLOGIES: UPC-E SYSTEM NUMBER

UPC-E0

E (0) OFF

E (0) ON

UPC-E1

E (1) ON

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 E(1) selection.

UPC-E EXPAND TO UPC-A

ENABLE

DISABLE

NOTE:

1. If UPC-E EXPAND TO UPC A FORMAT is 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-33

SYMBOLOGIES FORMATTING: UPC- A

UPC- A

. H001$

ENABLE

. H002$

DISABLE

. H003$

LEAD DIGIT SEND

. H004$

LEAD DIGIT NO SEND

. H005$

CHECK DIGIT SEND

. H006$

CHECK DIGIT NO SEND

UPC-A EXPAND TO EAN-13

. H068$

ENABLE

. H067$

DISABLE

ADD ON SUPPLEMENT

. H033$

+5 ON

. H034$

+ 5 OFF

. H035$

+2 ON

. H036$

+ 2 OFF

. H045$

ADD A SPACE ON

. H046$

ADD A SPACE OFF

. H060$

ADDENDA REQUIRED ON

. H059$

ADDENDA REQUIRED OFF

NOTE:

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

GROUP-34

SYMBOLOGIES FORMATTING: EAN 8

EAN-8

. H019$

ENABLE

. H020$

DISABLE

. H021$

LEAD DIGIT SEND

. H022$

LEAD DIGIT NO SEND

. H023$

CHECK DIGIT SEND

. H024$

CHECK DIGIT NO SEND

ADD ON SUPPLEMENT

. H029$

+ 5 ON

. H030$

+ 5 OFF

. H031$

+ 2 ON

. H032$

+ 2 OFF

. H043$

ADD A SPACE ON

. H044$

ADD A SPACE OFF

. H062$

ADDENDA REQUIRED ON

. H061$

ADDENDA REQUIRED OFF

NOTE:

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

GROUP-35

SYMBOLOGIES FORMATTING: EAN13, ISBN, ISSN, ISMN

EAN-13

. H013$

ENABLE

. H014$

DISABLE

. H015$

LEAD DIGIT SEND

. H016$

LEAD DIGIT NO SEND

. H017$

CHECK DIGIT SEND

. H018$

CHECK DIGIT NO SEND

ADD ON SUPPLEMENT

. H025$

+ 5 ON

. H026$

+ 5 OFF

. H027$

+ 2 ON

. H028$

+ 2 OFF

. H041$

ADD A SPACE ON

. H042$

ADD A SPACE OFF

. H058$

ADDENDA REQUIRED ON

. H057$

ADDENDA REQUIRED OFF

ISBN

. H050$

ISBN OFF

. H049$

ISBN ON

NOTES:

1. If ADDENDA REQUIRED is set to ON, the scanner will only read an EAN-13 bar code that has an addenda.
2. Either ISSN or ISBN will be considered as an extension of EAN-13. If ISSN or ISBN needs to be read, EAN-13 must be enabled. If ISSN and ISBN need to be read with addenda, EAN-13 must be enabled with ADDENDA REQUIRED set to ON, and +2 ON or +5 ON must be enabled as well.

ISSN

. H052$

ISSN OFF

. H051$

ISSN ON

NOTE:

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

GROUP-36

SYMBOLOGIES: EAN/UCC-128, CODE 128

EAN/ UCC-128

. M001$

ENABLE

. M002$

DISABLE

. M003$

CODE ID ENABLE

. M004$

CODE ID DISABLE

. M005$

FUNC 1 CHAR SEND

. M006$

FUNC 1 CHAR NOT SEND

. M007$

DEFINE EAN 128

NOTES: DEFINE EAN 128

The first FNC1 character is translated to]c1, and the second FNC1 character is translated to an ASCII <GS> character (scan from Group 40-46)

String format:

]C1	DATA CHARACTERS	<GS>	DATA CHARACTERS

Setting Procedure:

1: Scan DEFINE EAN128.
2: Scan ASCII Code (Group 40-46)
3: Scan DEFINE EAN128.

CODE 128

. J010$

ENABLE

. J011$

DISABLE

. J012$

MIN LENGTH (5)

. J013$

MAX LENGTH (48)

GROUP-37

GS1 DataBar, LIMITED, EXPANDED

GS1 DataBar (RSS) - OMNI & STACKED

. N032$

GS1 DataBar ENABLE

. N033$

GS1 DataBar DISABLE

. N034$

GS1 DataBar CHECK DIGIT SEND

. N035$

GS1 DataBar CHECK DIGIT NOT SEND

. N036$

GS1 DataBar PREFIX SEND

. N037$

GS1 DataBar PREFIX NOT SEND

. N038$

GS1 DataBar STACKED ENABLE

. N039$

GS1 DataBar STACKED DISABLE

. P024$

GS1 DataBar SET ID

GS1 DataBar (RSS) - LIMITED

. N010$

GS1 DataBar LIMITED ENABLE

. N011$

GS1 DataBar LIMITED DISABLE

. N012$

GS1 DataBar LIMITED CHECK DIGIT SEND

. N013$

GS1 DataBar LIMITED CHECK DIGIT NOT SEND

. N024$

GS1 DataBar LIMITED PREFIX SEND

. N025$

GS1 DataBar LIMITED PREFIX NOT SEND

. P019$

GS1 DataBar LIMITED SET ID

GS1 DataBar (RSS) - EXPANDED

. N026$

GS1 DataBar EXPANDED ENABLE

. N027$

GS1 DataBar EXPANDED DISABLE

. N028$

GS1 DataBar EXPANDED STACKED ENABLE

. N029$

GS1 DataBar EXPANDED STACKED DISABLE

. N030$

GS1 DataBar EXPANDED MIN LENGTH

. N031$

GS1 DataBar EXPANDED MAX LENGTH

. P020$

GS1 DataBar EXPANDED SET ID

GROUP-38

FULL ASCII TABLE (CODE 39)
CONTROL CODES

%U  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-39

FULL ASCII TABLE (CODE 39)
CONTROL CODES

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

GROUP-40

FULL ASCII TABLE (CODE 39)
SYMBOLS

+

-

.

$

%

/

\

!

@

#

^

~

&

*

-

=

|

GROUP-41

FULL ASCII TABLE (CODE 39)
SYMBOLS

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

GROUP-42

FULL ASCII TABLE (CODE 39)
UPPER CASE ALPHABETS

	A
	B
	C
	D
	E
	F
	G
	H
	I
	J
	K
	L
	M

GROUP-43

FULL ASCII TABLE (CODE 39)
UPPER CASE ALPHABETS

N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

GROUP-44

FULL ASCII TABLE (CODE 39)
LOWER CASE ALPHABETS

a

b

c

d

e

f

g

h

i

j

k

l

m

GROUP-45

FULL ASCII TABLE (CODE 39)
LOWER CASE ALPHABETS

n

o

p

q

r

s

t

u

v

w

x

y

z

GROUP-46

FULL ASCII TABLE (CODE 39)
NUMBERS


0


1


2


3


4


5


6


7


8


9

GROUP-47

FULL ASCII TABLE (CODE 39)
FUNCTION KEYS

F1 $TA

F2 $TB

F3 $TC

F4 $TD

F5 $TE

F6 $TF

F7 $TG

F8 $TH

F9 $TI

F10 $TJ

F11 $TK

F12 $TL

Home $TM

End $TN

Enter (Numeric Key) $T+D

App $T+O

GROUP-48

FULL ASCII TABLE (CODE 39)
NAVIGATION KEYS

$TO

Cursor Right

$TP

Cursor Left

$TQ

Cursor Up

$TR

Cursor Down

$TS

Page Up

$TT

Page Down

$TU

Tab

$TV

Back Tab

$TW

Esc

$TX

Enter

$TY

BS

$TZ

Ins

$T%K

Del

GROUP-49

FULL ASCII TABLE (CODE 39)
MODIFIER KEYS

$T%L

Alt (Left) make*1

$T+E

Alt (Right) make

$T%N

Shift (Left) make *2

$T+I

Shift (Right) make

$T+K

Win (Left) make

$T+M

Win (Right) make

$T%W

Ctrl (Left) make *3

$T+G

Ctrl (Right) make

$T%M

Alt (Left) break

$T+F

Alt (Right) break

$T%O

Shift (Left) break

$T+J

Shift (Right) break

$T+L

Win (Left) break

$T+N

Win (Right) break

$T+A

Ctrl (Left) break

$T+H

Ctrl (Right) break

For UK Keyboard Special Character

$T+B

¬

$T+C

£

Note:

*1: When “Alt(Left)Make” is programmed, please scan “Alt(Left)Break” to resume barcode setting.
*2: When “Shift(Left)Make” is programmed, please scan “Shift(Left)Break” to resume barcode setting.
*3: When “Ctrl(Left)Make” is programmed, please scan “Ctrl(Left)Break” to resume barcode setting.

APPENDIX 1

DEFAULT TABLE 1

GROUP	PARAMETER	DEFAULT
1	Setup Code	ON
	Function Code Conversion	ON
2	Reading Mode	Trigger Mode
	Button Preference	Both Buttons
	Illumination Preference	Laser always ON, LED ON after 1 sec
3	Beep Tone	Medium
	Terminator	CR (BT HID, USB HID)
		CR+LF (BT SPS, USB VCP)
4	Send Data Length	OFF
	Preamble	None
	Postamble	None
5	Inverse Barcode	Disable
	Code ID (Symbology ID)	Disable Code ID
7~9	Set ID	None
10	Interblock Delay	0mS
	Intercharacter Delay	16mS
11	Keyboard Layout	English (USA)
12	Capital Lock Mode	Caplock OFF
	Numeric Key	Alphanumeric Key
	HT/CR/ESC Conversion	Disable
13	Interface	N/A
15	Batch Mode	Disable
	Wake-up Method	Trigger Button
16	Power Off Timeout	30 seconds
18	Data Format	<Date><Time><Barcode Data>
	Field Separator	,
	Set Date	N/A
	Set Time	N/A
20	Date Format	DD/MM/YYYY
	Time Format	HH:MM:SS
20~22	**Enable/Disable Symbologies**	
	Code 32	Disable
	China Postal Code	Disable
	UK Plessey Code	Disable
	Industrial 2 of 5	Disable
	Matrix 2 of 5	Disable
	Interleaved 2 of 5	Enable
	Code 128	Enable
	Codabar	Enable
	Telepen	Disable
	UPC-A	Enable
	UPC-E	Enable
	EAN-8	Enable
	EAN-13	Enable
	MSI	Disable
	Code 39	Enable
	Code 11	Disable
	Code 93	Disable
	EAN-128	Enable
	IATA	Disable
	GS1 Databar	Disable
	GS1 Databar Stacked	Enable
	GS1 Databar Limited	Disable
	GS1 Databar Expanded	Disable
	GS1 Databar Stacked	Enable
22	**China Postal Code (Toshiba Code)**	
	Enable/Disable	Disable
	Min Length	11
	Max Length	48
	Check Digit Verification	Disable CDV
23	**MSI**	
	Enable/Disable	Disable
	Check Digit Verification	CDV & Send CD
	Check Digit Mod	Check Digit Single Mod 1
	Min Length	6
	Max Length	48
	UK Plessey Code	
	Enable/Disable	Disable
	Check Digit Verification	CDV & Not Send CD

APPENDIX 1

DEFAULT TABLE 2

GROUP	PARAMETER	DEFAULT
24	**Code 93**	
	Enable/Disable	Disable
	Min Length	6
	Max Length	48
	Telepen	
	Enable/Disable	Disable
	Number/ASCII	ASCII
	IATA	
	Enable/Disable	Disable
	Check Digit Verification	Disable CDV
	Min Length	6
	Max Length	48
25	**Interleaved 2 of 5**	
	Enable/Disable	Enable
	Check Digit Verification	Disable CDV
	Suppressed	No Suppressed
	Min Length	6
	Max Length	48
	Code 11	
	Enable/Disable	Disable
	Check Digit Verification	Disable CDV
	Min Length	6
	Max Length	32
26	**Industrial 2 of 5**	
	Enable/Disable	Disable
	Check Digit Verification	Disable CDV
	Min Length	6
	Max Length	48
	Matrix 2 of 5	
	Enable/Disable	Disable
	Check Digit Verification	Disable CDV
	Min Length	6
	Max Length	48
27	**Codabar**	
	Enable/Disable	Enable
	Check Digit Verification	Disable CDV
	Min Length	6
	Max Length	48
	Start/Stop	Send
	Start/Stop Type	ST/SP: ABCD/ABCD
	CLSI Format	CLSI Format OFF
28	**ABC-Codabar**	
	ON/OFF	OFF
	Insert Data	Insert Data OFF
	CX-Codabar	
	ON/OFF	OFF
	Insert Data	Insert Data OFF
29	**Codabar Coupling**	
	ON/OFF	OFF
	Insert Data	Insert Data OFF
	Adjacent Required	OFF
30	**Code 39**	
	Enable/Disable	Enable
	Check Digit Verification	Disable CDV
	Min Length	1
	Max Length	48
	Full ASCII Code 39	Enable
	Start/Stop	Not Send
	Code 32	
	Enable/Disable	Disable
	Leading	Send
	Tailing	Send
31	**UPC-E**	
	Enable/Disable	Enable
	Check Digit Verification	Send CD
	Lead Digit	Send
	+ 5	OFF
	+ 2	OFF
	Add a Space	OFF
	Addenda Required	OFF

APPENDIX 1

DEFAULT TABLE 3

GROUP	PARAMETER	DEFAULT
32	UPC-E0	ON
	UPC-E1	OFF
	UPC-E Expand to UPC-A	Disable
33	**UPC-A**	
	Enable/Disable	Enable
	Check Digit Verification	Send CD
	Lead Digit	Send
	UPC-A Expand to EAN-13	Disable
	+ 5	OFF
	+ 2	OFF
	Add a Space	OFF
	Addenda Required	OFF
34	**EAN-8**	
	Enable/Disable	Enable
	Check Digit Verification	Send CD
	Lead Digit	Send
	+ 5	OFF
	+ 2	OFF
	Add a Space	OFF
	Addenda Required	OFF
35	**EAN-13**	
	Enable/Disable	Enable
	Check Digit Verification	Send CD
	Lead Digit	Send
	+ 5	OFF
	+ 2	OFF
	Add a Space	OFF
	Addenda Required	OFF
	ISBN	OFF
	ISSN	OFF
	ISMN	OFF
36	**EAN/UCC-128**	
	Enable/Disable	Enable
	Func 1 Char	Not Send
	Code 128	
	Enable/Disable	Enable
	Min Length	5
	Max Length	48
37	**GS1 Databar**	
	Enable/Disable	Disable
	Check Digit Verification	Not Send CD
	Prefix	Not Send
	GS1 Databar Stacked/Omnidirectional	
	Enable/Disable	Enable
	GS1 Databar Limited	
	Enable/Disable	Disable
	Check Digit Verification	Not Send CD
	Prefix	Not Send
	GS1 Databar Expanded	
	Enable/Disable	Disable
	GS1 Databar Expanded Stacked	
	Enable/Disable	Enable
	Min Length	1
	Max Length	74

APPENDIX 2

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)

CODE-39

Interleaved 2of5

UPC

EAN

APPENDIX 2

BAR CODE TEST CHART

DENSITY	NARROW mm(mil)	WIDE mm(mil)	CHAR.GAP mm(mil)	N/W RATIO
LOW DENSITY	0.33(13)	0.825(32.5)	0.33(13)	1/2.5

LOW DENSITY

C9876543210D

CODE-39 TEST

0012345690