Wire Less Bar Code Scanner

User Manual

Version：TS_UM_EN_V1.0.2

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Notice

1. Please carefully read the User Manual before using the barcode the scanner.
2. All software, including firmware, furnished to the user is on a licensed basis.
2. The right is reserved to make changes to any software or product to improve reliability, function, or design.
3. The material in this manual is subject to change without notice.

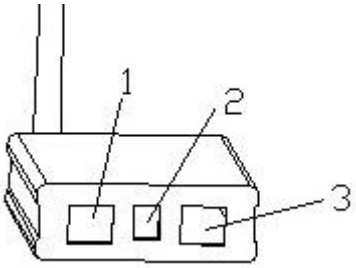
Contents

Parts of the scanner and Host

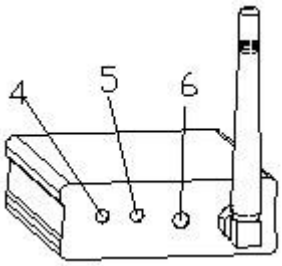
Parts of the scanner

① Exit window
②LED
③Trigger
④Cable interface port / charging port
⑤Release-hole of the cable

Panels of Host



1. Host Port
2. Power Port （Reserved）
3. Charging Port

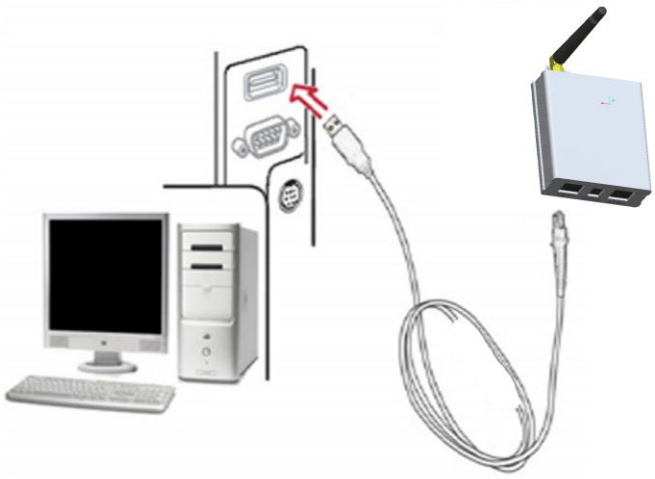


4. Channel Settings button
5. Pairing Button
6. LED

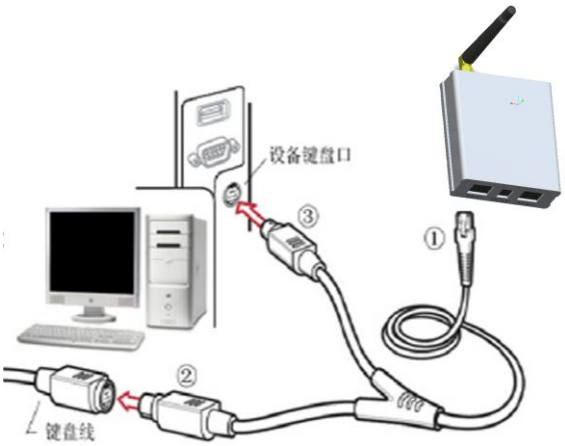
Introduction to installation

Installation Host

1. Switch off the host;
2. Refer to the below pictures, connect the PC with the scanner based on different cables;
3. Ensure that all connections are secure.
4. Switch on the host system. If installation is successful, the beeper will beep and LED will light.



USB cable

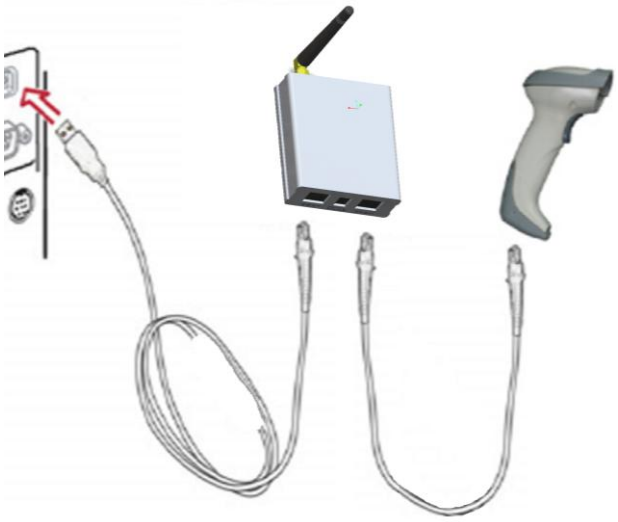


PS2 cable

RS232 cable

Charging

When the green LED keeps flashing or the Scanner shut down immediately after powered up, these mean the battery of Scanner runs out, and need Charging.
Connect the scanner to the Host with the Charging Cable to charge Scanner. The green LED keeps flashing when the Scanner is charging until this operation is finished.



Charging

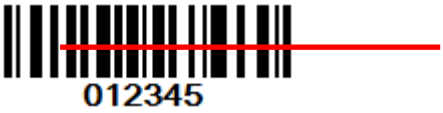
Scanning

When the scanner is scanning, ensure the scan line crosses every bar and space of the bar code.

RIGHT

RIGHT

WRONG



WRONG

the Scan Line on the bar code

Programming instruction

The scanner is programmed by scanning the setting barcode in the Manual. There are two kinds of Programming instructions. One of them programmed with Parameter and the other one of them without Parameter.

Programming without Parameter

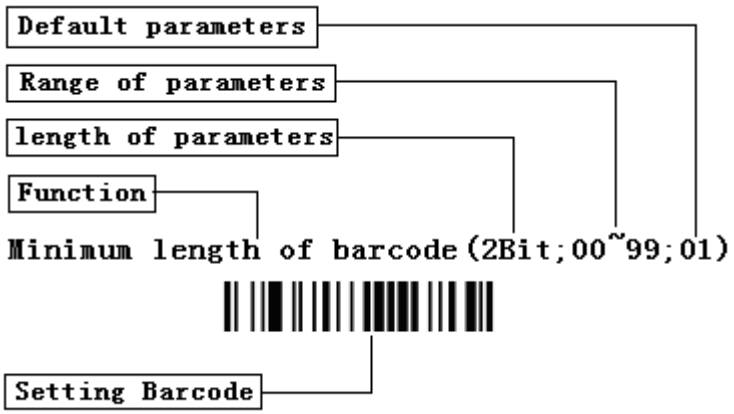
When programming without parameter, only one setting barcode is need to be scanned. For example, shut down the beeper of the scanner just scan the bar code directly.
When it is programmed successful, the scanner issue a “beep beep” sound, but issue a “beep beep beep” sounds when programmed fails.

Mute

NOTE: the factory default settings are indicated with asterisks (*).

Programming with Parameter

It is need to scan more than one setting barcode to program the scanner with parameter.



Program Parameters

The steps of programming are:

1. Scan the Function Setting Barcode. The Scanner will issue a "beep” sound, and the Red LED is on until the program is finished.
2. Scan the parameters bar code. The parameters may be one or more than one digits.
3. Scan the setting barcode “Finish Setting”. If it is programmed successful , the scanner will issue a “beep beep” sound, but issue a “beep beep beep” sound when fails.

e.g.：Set min. code length of Code 128 to 5 chars ：

1：Open the manual and turn chapter "code128 ". Scan the setting bar code “Scan Min. Code Length”.

Scan Min. Code Length（2 Digits；00~99，1*）

2：Turn to the last page of this Manual Appendix 10 Parameter bar code, scan the parameter bar code “0” and “5”：

0

5

3：Scan “Finish Setting”, finish the setting。

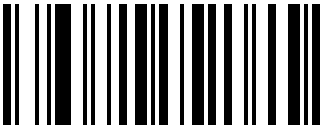
Finish Setting

Set Defaults And Information Display

Set Factory Defaults

If you wish to return the base unit to the entire factory default settings (radio communication setting is not included), scan the barcode ”**Set Defaults**”.

Set Defaults



Products Information Display

If you wish to display the firmware version or Serial number of the scanner, scan the barcode below.

Scanner Information Display

Scanner Serial number Display

If you wish to display the firmware version or Serial number of the Host, scan the barcode below.

Host Information Display

Host Serial number Display

Communication Information and Battery Power Display

Battery Power Display

Communication Channel and ID Number or Scanner Display

Interface selection

This scanner supports interfaces such as keyboard wedge, RS-232 serial wedge, and USB interface.
Typically, host is able to identify the host port type automatically. In extreme cases, host port may need setting manually if the host fails to identify it.

Automatic Identification*

USB

PS/2 Key Board

RS232

Scanning Mode Setting

Good-read off scanning Mode: The trigger button must be pressed once to activate scanning. The light source of scanner stops scanning when there is a successful reading or no code is decoded after the Stand-by duration elapsed.

Select Good-read off scanning Mode *

Auto-detection scanning Mode: The scanner will start scan Automatically if any object enter the scan area. The laser light of scanner stops scanning when there is a successful reading or no code is decoded after the Stand-by duration elapsed. Once the laser light stops scanning, the present object must be remove away from the scan area to enable Auto-detect sensor.

Select Auto-detection scan

Press Scanning Mode：It can continue scan barcode when the button is continuing pressed.

Press Scanning Mode

Click Scanning Mode: When the button is click, the scanner will keep scanning the barcode until the barcode is reader or the Stand-by duration elapsed.

Click Scanning Mode

Continuous Scanning mode: the scan engine is always scanning and decoding. The module will read the barcode which gets into the scanning area automatically. Only when the barcode that has been read gets out of the scanning area, the module can read the next barcode.

Select Continuous Scanning mode

Auto Continue mode: The scanner will start continuous scan Automatically if any object enter the scan area. When there is no bar code is read for half a minute, the scanner shutdown the laser line and exit continuous scanning mode.

Auto Continue mode

Keyboard wedge

Keyboard type

IBM AT，PS/2 *

Other（Reserved）

Keyboard layout

USA *

Italian

French

Turkish F

Turkish Q

Clock period

According to the PS2 protocol, the clock is provided by the device, e.g. keyboard or scanner, with the period between 60us to 200us.

60 uS

80 uS*

100 uS

200 uS

Delay-after-compound-key

In some rare occasions, machine with low speed PS2 communication portwould require a free time gap following the press/release of the compound key (Shift, Ctrl or Alt).

0 mS*

10 mS

20 mS

40 mS

80 mS

Numeric key:

Alphabetic key *

Numeric keypad

Alt+ keypad

Power-on simulation

All of the PCs check the keyboard status during power-on self test. It simulates keyboard timing and passes keyboard present status to the PC during power-on.

Enable

Disable *

Inter-character delay

This delay is inserted after each data character transmitted.

0 mS*

5 mS

10 mS

20 mS

40 mS

80 mS

Inter-byte delay:

This delay is inserted after each byte transmitted. Normally a character is comprised of three or above bytes.

1 mS*

2 mS

4 mS

8 mS

Caps Lock reversion

By setting enable, the status of Caps Lock key (i.e. being pressed ON or OFF) on the keyboard is simulated in a reversion status.

Enable Caps Lock *

Disable Caps Lock

Caps Lock override

If this function is enabled, on AT or AT notebook hosts, the keyboard ignores the state of the Caps Lock key. Therefore, an ‘A’ in the bar code is sent as an ‘A’ no matter what the state of the keyboard’s Caps Lock key

Enable

Disable*

USB interface

USB device type

HID Keyboard*

Virtual RS232 Port（reserved）

IBM Table Top USB

IBM Hand-Held USB

USB OPOS Hand-Held

USB Keyboard layout

USA*

German

French

Other

USB Keystroke Delay

No Delay*

20mS

40mS

USB CAPS Lock Override

Enable*

Disable

USB Ignore Unknown Characters

Enable

Disable*

Emulate Keypad

Enable this to send all characters as ASCII sequences over the numeric keypad. For example, ASCII A transmits as "ALT make" 0 6 5 "ALT Break

Enable

Disable*

Simulated Caps Lock

Enable this to invert the upper and lower case characters on the scanned bar code as if the Caps Lock state is enabled on the keyboard. This inversion occurs regardless of the keyboard's Caps Lock state

Enable

Disable*

USB Keyboard FN 1 Substitution

This option applies only to the USB HID Keyboard Emulation device. When enabled, this allows replacing any FN 1 characters in an EAN 128 bar code with a Key Category and value chosen by the user.

Enable

Disable*

RS-232 Interface

Baud Rate

2400

4800

9600*

19200

38400

57600

Handshaking

None： Scan the bar code below if no Hardware Handshaking is desired

None（Default）

Standard RTS/CTS： Scan the bar code below to select Standard RTS/CTS Hardware Handshaking.

Standard RTS/CTS

RTS/CTS Option 1: When RTS/CTS Option 1 is selected, the scanner asserts RTS before transmitting and ignores the state of CTS. The scanner de-asserts RTS when the transmission is complete.

RTS/CTS Option 1

RTS/CTS Option 2: When Option 2 is selected, RTS is always high or low (user-programmed logic level). However, the scanner waits for CTS to be asserted before transmitting data. If CTS is not asserted within Host Serial Response Time-out, the scanner issues an error indication and discards the data

RTS/CTS Option 2

RTS/CTS Option 3: When Option 3 is selected, the scanner asserts RTS prior to any data transmission, regardless of the state of CTS. The scanner waits up to Host Serial Response Time-out for CTS to be asserted. If CTS is not asserted during this time, the scanner issues an error indication and discards the data. The scanner de-asserts RTS when transmission is complete.

RTS/CTS Option 3

ACK/NAK: When this option is selected, after transmitting data, the scanner expects either an ACK or NAK response from the host. When a NAK is received, the scanner transmits the same data again and waits for either an ACK or NAK. After three unsuccessful attempts to send data when NAKs are received, the scanner issues an error indication and discards the data.

ACK/NCK

ENQ: When this option is selected, the scanner waits for an ENQ character from the host before transmitting data. If an ENQ is not received within the Host Serial Response Time-out, the scanner issues an error indication and discards the data. The host must transmit an ENQ character at least every Host Serial Response Time-out to prevent transmission errors.

ENQ

ACK/NAK with ENQ: This combines the two previous options. For re-transmissions of data, due to a NAK from the host, an additional ENQ is not required.

ACK/NCK with ENQ

XON/XOFF: An XOFF character turns the scanner transmission off until the scanner receives an XON character. There are two situations for XON/XOFF:

• XOFF is received before the scanner has data to send. When the scanner has data to send, it waits up to Host Serial Response Time-out for an XON character before transmission. If the XON is not received within this time, the scanner issues an error indication and discards the data.

• XOFF is received during a transmission. Data transmission then stops after sending the current byte. When the scanner receives an XON character, it sends the rest of the data message. The scanner waits up to 30 seconds for the XON

XON/XOFF

RTS Line State

Host: Low RTS （Default）

Host: High RTS &RH

Host Serial Response Time-out

2 sec（Default）

5 sec

7.5 sec

10 sec

Data Bits

7-Bit

8-Bit（Default）

Stop Bit Select

1 Stop Bit（Default）

2 Stop Bit

Parity

None（Default）

Odd

Even

Select Mark parity and the parity bit is always 1.

Mart

Select Space parity and the parity bit is always 0.

Space

Inter character Delay

This parameter specifies the inter character delay inserted between character transmissions.

0mS

5mS

25mS

50mS

75mS

99mS

Global Settings

Element amendment

Enable Element amendment *

Disable Element amendment

Printable character Output only

Enable

Disable*

Decoder optimization

Enable Decoder optimization *

Disable Decoder optimization

Save Power

Enable*

Disable

Standby duration

2 second

5 second *

10 second

20 second

Double confirm

Disable Double confirm*

2 Times

5 Times

10 Times

Same barcode delay time

If a barcode has been scanned and output once successfully, the laser beam must be off or moved away from the barcode beyond delay time to active scanning the same barcode. When this feature is set to be “0xFF”, then the delay time is indefinite.

Same barcode delay time（2 Digits;00~99;00*）

Global Max./Min. code length

Global Max. code length（2 Digits;00~99;99*)

Global Min. code length（2 Digits;00~99;XX*)

Global G1-G6 string selection

Global Insert String 1(1 Digits；0~6; 0*)

Global Insert String 2(1 Digits；0~6; 0*)

Decode UPC/EAN Only With Supplementals

Enable

Disable *

Indication

Volume of beeper

High*

Middle

Low

Mute

Beep tone

High Tone

Middle Tone *

Low Tone

Wire Less Communication Setting

Unpair the scanner from host

Unpair the scanner from host

Pair Scanner with Host

Pairing is the process by which a scanner initiates communication with a host. The scanner with the Host pairing as follows:

1. Connect the scanner to the Host with the Charging Cable.
2. Press the "Pairing Button" until the Scanner issued a "beep beep" sound.

NOTE: A host is able to work with as more as 99 scanners at the same time.

Clear the Buffer of Scanner

Scan the setting bar code below will clear the bar code data save in the scanner buffer.

Clear the Buffer of Scanner

Wire Less Channel

When there are more than one host work in the same Space, every host has to work in different channel. Channel is set as follows:

1. Open a Notepad or other text editor.
2. Press the "Channel Settings button" to change the channel of a host, and the channel NO will be displayed in the screen.

Scanner ID

Set the Scanner ID（2 Digits；00~99；00*）

Add Scanner ID as Prefix

If this item is enabled, the scanner will add its ID as prefix of every barcode. E.g. When scan the bar code "12345",if the ID of the scanner is "15",and the output barcode data will be "ID1512345".

NOTE: The ID of a scanner can be set manually or assigned by the host automatically. Every scanner work with the same Host can't be with the same ID.

Enable Add Scanner ID as Prefix

Disable Add Scanner ID as Prefix *

Power off Interval

Power Off Interval（2 Digits；00~99seconds；15seconds*）4

Shut down the Scanner Immediately

RF operating mode:

NO-Store Mode: Do not batch data. The scanner attempts to transmit every scanned barcode. If the transmission is failed, the barcode data is ignored and issued a "beep beep beep" sound.

Auto-store Mode: The scanner starts storing barcode data when it loses its connection to a host (for example, when a user holding the scanner walks out of range). Data transmission is triggered by reestablishing the connection with hsot (for example, when a user holding the scanner walks back into range).

Manual Transmission Mode : Data transmission is triggered by scanning "**Start transfer Bar Code Data**" .

Auto-Store Mode*

NO-Store Mode

Manual Transmission Mode

Start transfer Bar Code Data (for Manual Transmission Mode**)**

Wire Less Communication Inter-character delay

Scan Wire Less Communication Inter-character delay（2 Digits；0.0~9.9seconds；0.5seconds*）

EAN-13 and ISBN/ISSN

Enable/Disable EAN-13

Enable EAN-13* 0

Disable EAN-13

EAN-13 Check Digit Verification

Enable EAN-13 Check Digit Verification *

Disable EAN-13 Check Digit Verification

EAN-13 Check Digit Transmission

Transmit EAN-13 Check Digit*

Do Not Transmit EAN-13 Check Digit

Supplement Digits

2 Digits

5 Digits

2 Digits or 5 Digits

None*

ISBN/ISSN Conversion

Convert EAN-13 to ISBN/ISSN

Do Not Convert EAN-13 to ISBN/ISSN*

Code ID setting

Code ID is a one-or-two-character string used to represent the symbol upon a succeeding reading. If you want application to transmit Code ID, you must set Code ID transmission to be enabled. Refer to the chapter of

Scan Code ID（2Bit；00~FF； 65* ‘e’）C

Insert String 1 Selection

Scan one digits parameter (0~6) that: 0: no string insert to the barcode; 1~6: insert to the barcode G1~G6 to the barcode.

Scan Insert String 1（1Bit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

EAN-8

Enable/Disable EAN-8

Enable EAN-8*

Disable EAN-8

EAN-8 Check Digit Verification

Enable EAN-8 Check Digit Verification *

Disable EAN-8 Check Digit Verification

EAN-8 Check Digit Transmission

Transmit EAN-8 Check Digit L*

Do Not Transmit EAN-8 Check Digit

Supplement Digits

2 Digits

5 Digits

2 Digits or 5 Digits

None*

Expand EAN-8 to EAN-13

Expand EAN-8 to EAN-13

Do Not Convert EAN-8 to EAN-13*

Code ID setting (“d”)

Scan Code ID（2 Digits；00~FF； 64*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

UPC-A

Enable/Disable UPC-A

Enable UPC-A 0*

Disable UPC-A

UPC-A Check Digit Verification

Enable UPC-A Check Digit Verification *

Disable UPC-A Check Digit Verification

UPC-A Check Digit Transmission

Transmit UPC-A Check Digit *

Do Not Transmit UPC-A Check Digit

Supplement Digits

2 Digits

5 Digits

2 Digits or 5 Digits

None *

UPC-A Truncation/Expansion

Expand UPC-A to EAN-13

Truncate leading zeros

None*

Code ID setting (“b”)

Scan Code ID（2 Digits；00~FF； 62*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

UPC-E

Enable/Disable UPC-E

Enable UPC-E*

Disable UPC-E

UPC-E Check Digit Verification

Enable UPC-E Check Digit Verification *

Disable UPC-E Check Digit Verification

UPC-E Check Digit Transmission

Transmit UPC-E Check Digit *

Do Not Transmit UPC-E Check Digit

Supplement Digits

2 Digits

5 Digits

2 Digits or 5 Digits

None*

UPC-E Truncation/Expansion

Truncate leading zeros

Expand UPC-E to EAN-13

Expand UPC-E to UPC-A

None*

Code ID setting (“c”)

Scan Code ID（2 Digits；00~FF； 63*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Code128 C

Enable/Disable Code128

Enable Code 128*0

Disable Code 128

Code128 Check Digit Verification

Enable Code 128 Check Digit Verification *

Disable Code 128 Check Digit Verification

Code 128 Check Digit Transmission

Transmit Code 128 Check Digit *

Do Not Transmit Code 128 Check Digit

Code128 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting(“g”)

Scan Code ID（2 Digits；00~FF； 67*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

UCC/EAN 128

Enable/Disable UCC/EAN 128

Enable*

Disable

UCC/EAN 128 Check Digit Verification

Enable*

Disable

UCC/EAN 128 Check Digit Transmission

Transmit **UCC/EAN 128** Check Digit *

Do Not Transmit **UCC/EAN 128** Check Digit

UCC/EAN 128 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（ ‘g’）

Scan Code ID（2 Digits；00~FF； 67*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Code **39**

Enable/Disable Code 39

Enable*0

Disable

Code 39 Check Digit Verification

Enable

Disable*

Code 39 Check Digit Transmission

Transmit Code 39 Check Digit

Do Not Transmit Code 39 Check Digit *

Code 39 Full ASCII Conversion

Enable **Code 39** Full ASCII

Disable **Code 39** Full ASCII *

Start/End transmission

Enable Code 39 Start/End transmission

Disable Enable Code 39 Start/End transmission *

Convert Code 39 to Code 32

Enable Convert Code 39 to Code 32

Disable Convert Code 39 to Code 32*

Code 32 Prefix “A” transmission

Enable Code 32 Prefix “A” transmission

Disable Code 32 Prefix “A” transmission*

“*” as data character

Enable

Disable*

Code39 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99；1*）

Code ID setting（ ‘a’）

Scan Code ID（2 Digits；00~FF； 61*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Code **93**

Enable/Disable Code 93

Enable*

Disable

Code 93 Check Digit Verification

Enable Code 93 Check Digit Verification *

Disable Code 93 Check Digit Verification

Code 93 Check Digit Transmission

Transmit Code 93 Check Digit **

Do Not Transmit Code 93 Check Digit

Code 93 Full ASCII Conversion

Enable Code 93 Full ASCII

Disable Code 93 Full ASCII *

Code 93 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（ ‘h’）

Scan Code ID（2 Digits；00~FF； 68*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2 （1 Digit；0~6；0*）

Interleaved 2 of 5

Interleaved 2 of 52 of 5:

Data digits (Variable)	校Check digit (one bit ,optional)

Enable/Disable Format of Interleaved

Enable*

Disable

Interleaved 2 of 5 Check Digit Verification

Enable

Disable*

Interleaved 2 of 5 Check Digit Transmission

Transmit Interleaved 2 of 5 Check Digit

Do Not Transmit Interleaved 2 of 5 Check Digit *

Interleaved 2 of 5 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（ ‘i’）

Scan Code ID（2 Digits；00~FF； 69*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Industrial 2 of 5

Enable/Disable Industrial 2 of 5

Enable*

Disable

Industrial 2 of 5 Check Digit Verification

Enable

Disable *

Industrial 2 of 5 Check Digit Transmission

Transmit Industrial 2 of 5 Check Digit

Do Not Transmit Industrial 2 of 5 Check Digit *

Industrial 2 of 5 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（ ‘j’）

Scan Code ID（2 Digits；00~FF； 6A*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Matrix 2 of 5

Enable/Disable Matrix 2 of 5

Enable*

Disable

Matrix 2 of 5 Check Digit Verification

Enable

Disable *

Matrix 2 of 5 Check Digit Transmission

Transmit Matrix 2 of 5 Check Digit

Do Not Transmit Matrix 2 of 5 Check Digit *

Matrix 2 of 5 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（ ‘x’）

Scan Code ID（2 Digits；00~FF； 78*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Codabar

Enable/Disable Codabar

Enable*

Disable

Codabar Check Digit Verification

Enable

Disable*

Codabar Check Digit Transmission

Transmit **Codabar** Check Digit

Do Not Transmit **Codabar** Check Digit *

Start/End type

ABCD/ABCD *

abcd/abcd

ABCD/TN*E

abcd/tn*e

Start/End transmission

Enable

Disable *

Codarbar Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（‘k’）

Scan Code ID（2 Digits；00~FF； 6B*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Code **11**

Enable/Disable Code 11

Enable*

Disable

Code 11 Check Digit Verification

Enable1位校验码*

Enable2位校验码

Disable 校验

Code 11 Check Digit Transmission

Transmit **Code11** Check Digit

Do Not Transmit **Code11** Check Digit *

Code 11 Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，4*）

Code ID setting（‘m’）

Scan Code ID（2 Digits；00~FF； 6D*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

MSI/Plessey

Enable/Disable MSI/Plessey

Enable *0

Disable

MSI/Plessey Check Digit Verification

Enable 1 digit（Mod10）

Enable 2 digit（Mod10/10）

Enable 2 digit（Mod11/10）

Disable*

MSI/Plessey Check Digit Transmission

Transmit MSI/Plessey Check Digit

Do Not Transmit MSI/Plessey Check Digit *

MSI/Plessey Length

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，4*）

Code ID setting（‘f’）

Scan Code ID（2 Digits；00~FF； 66*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

UK/Plessey

Check digit verification: The UK/Plessey has two optional check digits. The check digit 1 and check digit 2 will be calculated as the sum module 10 or 11 of the data digits.

Enable/Disable UK /Plessey

Enable *

Disable

UK/Plessey Check Digit Verification

Enable*

Disable

UK /Plessey Check Digit Transmission

Transmit **UK /Plessey** Check Digit

Do Not Transmit **UK /Plessey** Check Digit *

UK/Plessy Lenght

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（‘u’）

Scan Code ID（2 Digits；00~FF； 75*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

GS1 DataBar (GS1 DataBar Truncated)

GS1 DataBar Truncated is structured and encoded the same as the standard GS1 DataBar format, except its height is reduced to a 13 modules minimum; while GS1 DataBar should have a height greaterthan or equal to 33 modules.

Enable/Disable GS1 DataBar

Enable *

Disable

Conversion

Convert GS1 DataBar to UCC/EAN 128

Convert GS1 DataBar to UPC-A or EAN-13

Disable Conversion *

Code ID setting（‘r’）

Scan Code ID（2 Digits；00~FF； 72*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

GS1 DataBar Limited

Enable/Disable GS1 DataBar Limited

Enable*

Disable

Conversion

Convert **GS1 DataBar Limited** UCC/EAN 128

Convert **GS1 DataBar Limited** UPC-A 或EAN-13

Disable Conversion*

Code ID setting（‘s’）

Scan Code ID（2 Digits；00~FF； 73*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

GS1 DataBar Expanded

Enable/Disable GS1 DataBar Expanded

Enable*

Disable

Conversion

Convert **GS1 DataBar Expanded** UCC/EAN 128

Disable Conversion*

GS1 DataBar Expanded Lenght

Scan Max. Code Length（2 Digits；00~99；99*）

Scan Min. Code Length（2 Digits；00~99，1*）

Code ID setting（‘p’）

Scan Code ID（2 Digits；00~FF； 70*）

Insert String 1 Selection

Scan Insert String 1（1 Digit；0~6；0*）

Insert String 2 Selection

Scan Insert String 2（1 Digit；0~6；0*）

Advanced Bar Code Data Formatting

Format of barcode data transmission：

Prefix	Code name	Preamble	Code ID	Code length	Code data	Code ID	Postamble	Suffix

Suffix Quick Setup

CR *L0

LF

CR & LF

None

Prefix

Transmit Prefix:

Do Not Transmit Prefix *

Scan Prefix（0~16 Chars，2 Digits /Char；00~FF； 00*）

Suffix

The default Suffix is CR。

Transmit Suffix *

Do Not Transmit Suffix

Scan Suffix（0~22 Chars，2 Digits /Char；00~FF； 00*）

Preamble

Transmit Preamble

Do Not Transmit Preamble *

Scan preamble（0~16 Chars，2 Digits /Char；00~FF； 00*）

Postamble

Transmit Postamble

Do Not Transmit Postamble *

Scan Postamble（0~16 Chars，2 Digits /Char；00~FF； 00*）

Code ID

Transmit Proprietary ID

Transmit AIM ID

Do Not Transmit Code ID*

Code ID position

Before code data *

After code data

Code name transmission

Transmit Code name

Do Not Transmit Code name *

Code length transmission

Transmit **Code length**

Do Not Transmit **Code length** *

Case conversion:

The characters within code data or the whole output string can be set in either upper case or lower case

Disable*

Upper (data only)

Lower (data only)

Upper (whole string)

Lower (whole string)

Insert String G1 Setting

Scan Inert String G1（0~16 Chars，2 Digits /Char；00~FF； 00*）

Scan the Position of G1（2 Digits；00~99； 00*）

Insert String G2 Setting

Scan Inert String G2（0~16 Chars，2 Digits /Char；00~FF； 00*）

Scan the Position of G2（2 Digits；00~99； 00*）

Insert String G3 Setting

G3 is also used as the string to be replaced when the replace function is enabled.

Scan Inert String G3（0~16 Chars，2 Digits /Char；00~FF； 00*）

Scan the Position of G3（2 Digits；00~99； 00*）

Insert String G4 Setting

G4 is also used as the string to replace G3 in a bar code data when the replace function is enabled.

Scan Inert String G4（0~16 Chars，2 Digits /Char；00~FF； 00*）

Scan the Position of G4（2 Digits；00~99； 00*）

FN1 substitution string setting

The FN1 character (0x1D) in an UCC/EAN128 barcode, or a Code 128 barcode, or a GS1 DataBar barcode can be substituted with a defined string.

Enable FN1 Substitution

Disable FN1 Substitution *

Scan **FN1 substitution string setting**（0~4 Chars，2 Digits /Char；00~FF； 00*）

Truncate leading G5 String setting

By setting G5, a defined leading character or string can be truncated. G5 can also be set to be repeated.

Scan G5 String（0~16 Chars，2 Digits /Char；00~FF； 00*）

Truncate leading G5 string setting (2 Digits；00~99； 01*）

Truncate ending G6 string setting

By setting G6, a defined ending character or string can be truncated. G5 can also be set to be repeated.

Scan G6 String（0~16 Chars，2 Digits /Char；00~FF； 00*）

Scan Repeat of a G6 String (2 Digits；00~99； 01*）

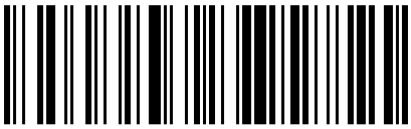
Replace String Setting

Replace G3 string to G4 string in barcode data.

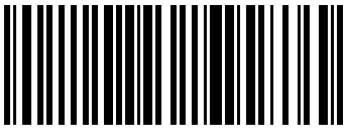
Enable

Disable *

Test Bar Code



Ticode2010



00012345000

1234567890

8765 4325

Appendix 2 Default setting for each barcode

Table 2 Default setting for each barcode

Code type	Read enable	Check digit verification	Check digit transmission	Min. code length	Proprietary code ID	AIM
EAN-13	√	√	√	(13)	e	]Em
EAN-8	√	√	√	(8)	d	]Em
ISBN/ISSN1	√	√	√	(13)	e	]Em
UPC-A	√	√	√	(12)	b	]Em
UPC-E	√	√	√	(8)	c	]Em
Code 128	√	√	-	1	g	]Cm
UCC/EAN 128	√	√	-	1	q	]Cm
Code 93	√	√	-	1	h	]Gm
Code 39	√	-	-	1	a	]Am
Code 11	√	√	-	4	m	-
Interleaved 2 of 5	√	-	-	6	i	]Im
Industrial 2 of 5	√	-	-	4	j	]Im
Matrix 2 of 5	√	-	-	6	x	]Im
China Post	√	√	-	(11)	y	]Im
Codabar	√	-	-	5	k	]Fm
MSI/Plessey	√	-	-	4	f	]Mm
UK/Plessey	√	-	-	1	u	]Mm
GS1 DataBar	√	-	-	(16)	r	]em
GS1 DataBar Truncated3	√	-	-	(16)	r	]em
GS1 DataBar Limited	√	-	-	(16)	s	]em
GS1 DataBar Expanded	√	-	-	1	p	]em
PDF417	-	-	-	1	n	]Lm
MicroPDF417	-	-	-	1	w	]Lm

NOTE:

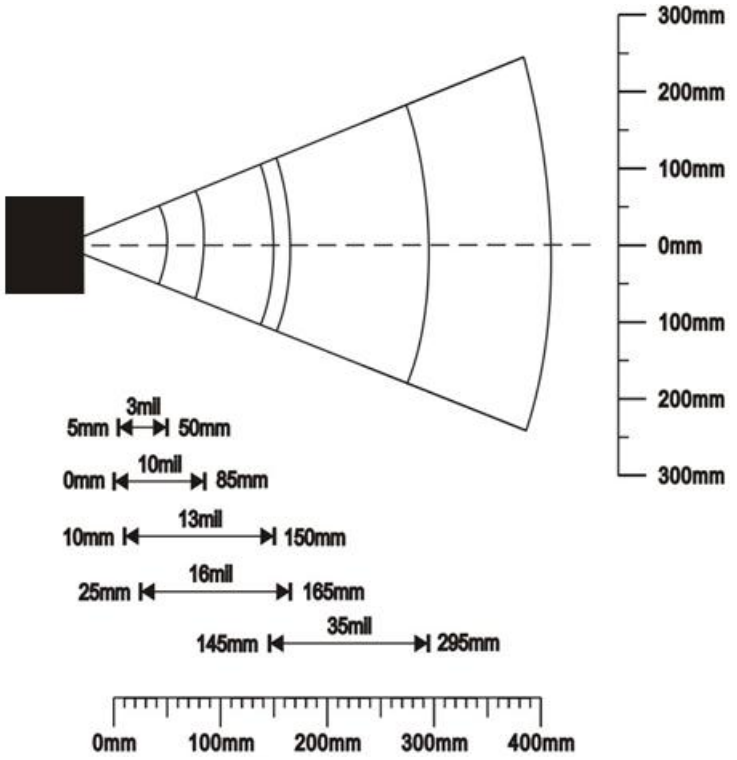
1 The settings for ISBN/ISSN and EAN-13 must be the same.

2 Fixed-length barcodes.

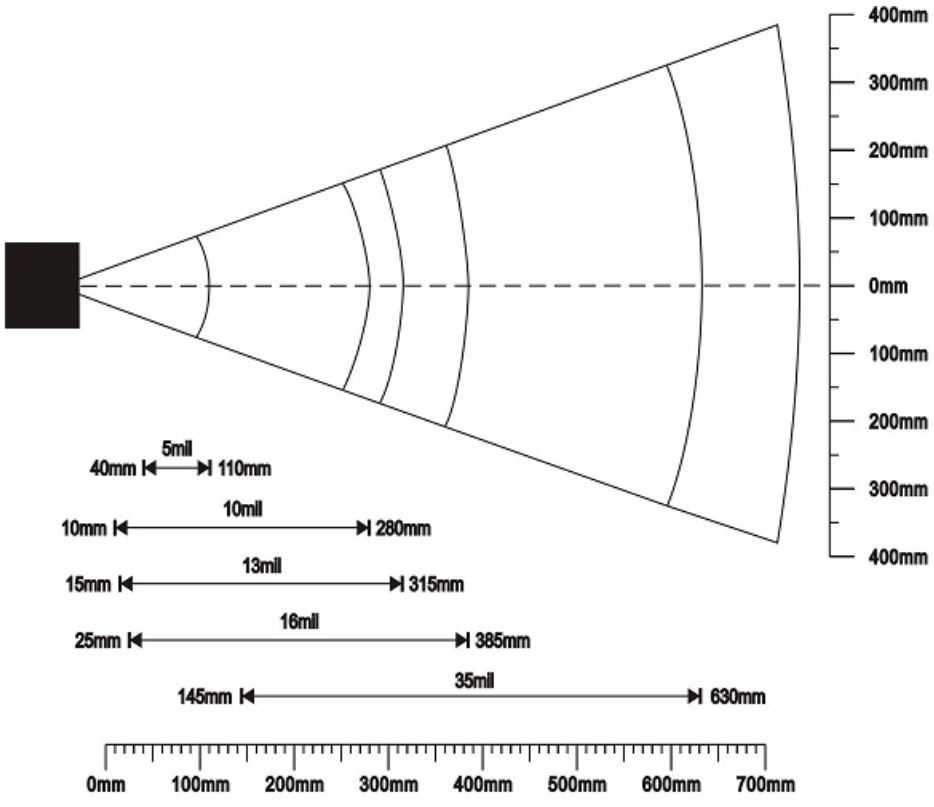
3 The settings for GS1 DataBar Truncated and GS1 DataBar must be the same.

Appendix 4 Decode zone

High-Density series



Long-Range series



Appendix 6 ASCII Table

Table 3 Function Keys

H / L	P/S2 keyboard/USB		RS-232	
	0	1	0	1
0	Null		NUL	DLE
1	Up	F1	SOH	DC1
2	Down	F2	STX	DC2
3	Left	F3	ETX	DC3
4	Right	F4	EOT	DC4
5	PgUp	F5	ENQ	NAK
6	PgDn	F6	ACK	SYN
7		F7	BEL	ETB
8	Bs	F8	BS	CAN
9	Tab	F9	HT	EM
A		F10	LF	SUB
B	Home	Esc	VT	ESC
C	End	F11	FF	FS
D	Enter	F12	CR	GS
E	Insert	Ctrl+	SO	RS
F	Delete	Alt+	SI	US

Table 4 Chars

H / L	2	3	4	5	6	7
0	SP	0	@	P	`	p
1	!	1	A	Q	a	q
2	“	2	B	R	b	r
3	#	3	C	S	c	s
4	$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	‘	7	G	W	g	w
8	（	8	H	X	h	x
9	）	9	I	Y	i	y
A	*	：	J	Z	j	z
B	+	;	K	[	k	{
C	,	<	L	\	l	|
D	-	=	M	]	m	}
E	.	>	N	^	n	~
F	/	?	O	_	o	DEL

Example：ASCII “！ ” = “21”。

Appendix 10 Parameter bar code

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Finish Setting