

Manuale

Lettore Barcode Laser 1D/2D TECNOACCESSORI® TC-BC2D-08

payment box

Setup Manual (Classic Edition)

catalogues

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Chapter I. Integrated settings

INTRODUCTION

This manual is intended to describe how to set up the appropriate functions for a scanner product.

There are two ways to set up the scanner.

setting code

The scanner can set the corresponding function by reading one or a group of special barcode, in the following section, we will introduce the corresponding setting option and function in detail and provide the corresponding setting code.

Set command

A set of hexadecimal strings that the host can send to set up the scanner, and in the following sections, in addition to describing the setup code, we will also describe the setup command string.

Setting commands can be used to automate the operation of the scanner, or you can integrate all relevant setting commands into the software and batch process them through secondary development.

Note: Except for the on and off commands, all commands need to be sent once to save the command for storage in the scanner after setup is complete, otherwise they will disappear after power failure, some commands will not be able to send commands directly after setup is complete, such as setting a different baud rate or a different interface type.

Set code identification



Instructions for use.

In the manual reading mode, the steps for scanning barcode are as follows

1. Hold down the scanner's trigger button, the sight line is activated and the red sight line appears.
2. Aim the red sight line at the center of the barcode, move the scanner and adjust the distance between it and the barcode to find the best reading distance.
3. When you hear the success tone sounds and the red lighted line goes out, the code reading is successful and the scanner transfers the decoded data to the host computer.

Note: In the reading process, for the same batch of barcodes, you will find that the distance between the scanner and the barcode is within a certain range, the reading success rate will be high, and this distance is the best reading distance.

Restore factory default

All scanners have a factory default setting, reading "Restore Factory Defaults" setting barcode will make all properties of the scanner set the software default state.



Restore factory default

Instructions for use.

You are most likely to use this barcode in the following situations.

1. There is an error in the scanner settings, such as the bar code cannot be recognized.
2. You have forgotten what settings you have made for the scanner and do not want to use them.
3. set up the scanner to use certain features that are not commonly used, and when finished.

View version number

Using a scanner to scan down to view the version number barcode to see the current scanner version number information.



View version number

Sound settings

Decoding Success Beep

Set the beep on or off after successful decoding.



@Y060100

Turn on the decoding success beep*



@Y060101

Turn off the decoding success beep.

audio announcement

Setting the duration of the successful decoding tone



@Y060200

Turn on voice announcement*



@Y060201

Turn off voice over

Note: Voice over requires external circuit support.

Lighting Settings

floodlight

Setting the scanner fill light on or off



@Y060301

Turn on fill light*



@Y060300

Turn off the fill light.

Standby status of fill light

When the scanner is in the idle state, you can set the brightness of the fill illumination lamp to be half on, and when it is off, the standby status lamp is off.



@Y060401

Turn the fill light on halfway.



@Y060400

Turn off the fill light and turn it on halfway*

Image recognition settings

Image Inversion (Inverted White) Setting

Orthographic barcode: Light background, dark barcode

Inverted barcode: barcode with dark background and light colored bars, also known as anti-white barcode, anti-color barcode



Orthographic image recognition*



Inverted image recognition

Terminator setting

The terminator suffix is used to mark the end of a complete data message. The terminator suffix must be the last thing that was sent with a piece of data and no additional data will be sent after it.

The fundamental difference between a suffix and a custom suffix is that the content of a custom suffix can be reformatted with decoded information, prefixes, etc., but not the suffix.



@Y030104

Transmission terminator*



@Y030103

Not transmitting the terminator.



@Y030100

Modify the terminator to <CR>(0x0D)*



@Y030101

Modify the terminator to

<CR> <LF>(0x0D,0x0A)



@Y030102

Modify the terminator to <HT>(0x09)

Chapter II. Communication settings

INTRODUCTION

When you use this scanner to communicate with different hosts, you need to set the scanner to the corresponding communication interface mode, and you can set the function of the scanner by scanning one or more set barcodes. You can choose to use USB (USB-KBW, USB-COM, USB-HID), TTL, RS232 serial communication interface mode and so on.

USB keyboard interface

The USB keyboard interface is the USB-KBW interface, and when the USB cable is connected, the scanner can be set to the USB-KBW input mode. In this mode, the scanner will become a virtual keyboard and the data receiving host will accept the input from this virtual keyboard as if it is a real keyboard. The process of sending the data decoded by the scanner is to hit each key corresponding to the data in the virtual keyboard.









The default scanner uses USB-KBW communication, which emulates the USB keyboard input mode and does not require driver installation.



USB-KBW interface*

National keyboard layout

The keyboard layout and symbols corresponding to different languages are not the same, so the scanner can be virtualized into different keyboards of different countries according to actual needs.

 <p>@Y020200</p> <p>U.S./ChineseEnglish*</p>	 <p>@Y020205</p> <p>Spain (Spanish)</p>
 <p>@Y020208</p> <p>Denmark (Danish)</p>	 <p>@Y020203</p> <p>United Kingdom (British English)</p>
 <p>@Y020204</p> <p>Italy (Italian)</p>	 <p>@Y020202</p> <p>France (French)</p>
 <p>@Y020201</p> <p>Germany (German)</p>	 <p>@Y020207</p> <p>Ukraine (Ukrainian)</p>

 @Y020209 Turkish (language)	 @Y020210 Japan (Japanese)
 @Y020206 Russia (Russian)	 @Y020211 Czech Republic (Czech language)
 @Y020215 Brazil	 @Y020214 Portugal
 @Y020213 Arabian	 @Y020212 Slovakia

Keyboard Emulation of Input Characters

When Keyboard Emulation Input Character is turned on, the character will be sent through the numeric keypad and will ignore the country keyboard layout setting. This mode also requires settings for **Code Page** selection and **Unicode** output. the Code Page determines the target language, and the Unicode output setting controls whether the input to the host is encoded in Unicode or Code Page.

USB keyboard emulation for inputting any ASCII character (0x00-0xFF) in any language format



@Y020301

turn on



@Y020300

Closure*

case sensitive conversion

By setting up the character case conversion function of the scanner, the English letters of the output data of the scanner can be converted to upper and lower case.

For example, if the barcode content is aBC123, set the scanner as "all lowercase", the host will get the data as "abc123". The default is Normal for normal output.



@Y020400

Normal*



@Y020401

Upper (all caps)



@Y020402

Lower (all lowercase)

Note: This parameter is valid only in standard keyboard input mode and keyboard emulation input control character mode.

USB-COM virtual serialinterface

When the scanner uses a USB connection and at the same time you want the host side to receive data by serial port, you should use the USB virtual serial port. From the host-side system interface, the scanner is connected to the host via the serial port. This function requires the appropriate driver to be installed on the host computer.



@Y010301

USB-COM

HID-POS interface

When the scanner uses USB-HID, the host will use the scanner as a HID-like device, the scanner using USB-HID mode can control the scanning work through the host, and no driver installation is required. For details of USB-HID data format and how to use, please contact our technical service personnel.



@Y010302

USB-HID

TTL/RS232 serial interface

Serial communication interface is a common way to connect scanners to host devices such as PCs and POS machines. When a scanner uses a serial communication interface, the scanner and host device must be perfectly matched in terms of serial communication protocol parameter configuration to ensure the accuracy of the transmitted data. The serial port uses adaptive, no additional setup is required.

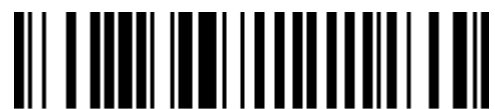
baud

Baud rate is the number of bits per second that are transmitted for serial data communication, and the baud rate used by the scanner and the data receiving host must be consistent to ensure accurate data transmission. The scanner supports the following baud rates listed below in bit/s. The baud rate of the scanner and the data receiving host must be consistent to ensure accurate data transmission.



@Y050101

2400bps



@Y050102

4800 bps



@Y050103

9600 bps*



@Y050104

19200 bps



@Y050105

38400bps



@Y050106

57600bps



@Y050107

115200 bps

check digit

A different parity type can be used by the scanner during serial transmission, but it must be the same as the parity type of the host computer.

If the number of "1" in the transmitted data is odd, the check character is 0.

Select even check, if the number of "1" in the transmitted data is even, the check character is 0.

Select No Checks to not send the parity character.



@Y050401

Odd check (ODD)



@Y050402

Even check (EVEN)



@Y050400

No check (NONE)*

data point

Optionally, 7 or 8 bits of data can be transmitted, so make sure that the data bits of the scanner and the data receiving host are the same.



@Y050200

8 data bits*



@Y050201

7 data bits

stop position

The stop bit is located at the end of each byte transmitted and is used to mark the completion of this byte's transmission and the start of the next byte's data.

The default setting is 1 stop bit. If you need to stop for a longer period of time, you can set 2 stop bits.



@Y050300

1 seat*



@Y050301

2 places

Chapter 3: The Literacy Model

Inductive Literacy Model

The machine enters the reading state until the code is read successfully or reaches the time set by the timeout of one reading and stops reading. When a new barcode is presented, it will enter the reading state again.

After setting the sensor mode, the light will be on when the scanner senses the barcode, if not, it will be in standby mode and the light will not be on.



Inductive literacy model*

Long Light Reading Mode

When the scanner is set to constant read mode, the scanner illuminator remains on permanently.



Long Light Reading Mode

Chapter 4 Bar Code Parameter Settings

INTRODUCTION

Each type of barcode has its own unique properties, and the setting codes in this chapter allow the scanner to adjust to these property changes. The fewer barcode types that are enabled for "Allow reading", the faster the scanner will read. You can prohibit the scanner from reading barcode types that will not be used to improve the performance of the scanner.

global setting



@Y040101

Enables all barcode types



@Y040100

Turn off all barcode types

Note: The setup code is not turned off when all barcodes are turned off

UPC-A

Allow/prohibit reading of UPC-A



@Y160101

UPC-A* is allowed to be read



@Y160100

UPC-A is unreadable.

UPC-E

Allow/prohibit reading of UPC-E



@Y170101

Allows reading of UPC-E0*



@Y170100

UPC-E0 is unreadable.



@Y180101

Permission to read UPC-E1*



@Y180100

UPC-E1 is unreadable.

EAN-8

Allow/prohibit EAN-8 reading



@Y150101

Allows EAN-8* to be read.



@Y150100

Cannot read EAN-8

EAN-13

Allow/prohibit reading of EAN-13



@Y140101

Allows EAN-13* to be read.



@Y140100

Cannot read EAN-13

ISBN

Allowed/prohibited to read ISBNs



@Y190101

Permission to read ISBNs



@Y190100

Prohibition of the reading of ISBNs*

Code 128

Allow/Disallow Code 128 reading



Code 128* is allowed to be read.



Code 128 is not readable.

Code 39

Allow/prohibit Code 39 reading



Permission to read Code 39*



Code 39 prohibiting reading

Checksum settings

The check character is not mandatory in Code 39 barcode data, but if there is a check character, it is the last character of the data. If there is a check character, it is the last character of the data. The check character is a value calculated from all the data and is used

to check that the data is correct. You can turn the check character on or off according to your needs and set whether or not to send the check character.

The default is "check off".



@Y110300

Close check*



@Y110301

Open the check.



@Y110201

transmission verification



@Y110200

No transmission of checksum

Code 93

Allow/prohibit Code 93 reading



@Y130101

Permission to read Code 93*



@Y130100

Prohibited from reading Code 93

Interleaved 2 of 5

Permitted/Prohibited Interleaved 2 of 5



@Y200101

Permission to read Interleaved 2 of 5



@Y200100

Prohibition of reading Interleaved 2 of 5*

Checksum settings

Interleaved 2 of 5 barcode data does not force the check character to be included in the barcode data; if there is a check character, it is the last character of the data. If there is a check character, it is the last character of the data. The check character is a value calculated from all the data and is used to check that the data is correct. You can turn the check

character on or off according to your needs and set whether or not to send the check character.

Interleaved 2 of 5 bar codes must be even in number of digits, the check character is included in the code and 0 is added before the first digit for odd numbers.

The default is "Turn off Interleaved 2 of 5 checksum", "Do not transmit Interleaved 2 of 5 checksum".



@Y200300

Close check*



@Y200301

Open the check.



@Y200201

and transmit the checks.



@Y200200

No transmission of checksum

If the setting is not to send check character, if the data length is less than the maximum read length limit after deducting 1 byte of check character, the code reading will fail. For example, if the minimum read length of Interleaved 2 of 5 in the current scanner setting is 4 bytes, and the check character is not transmitted, it will fail to read the total length of 4 bytes of Interleaved 2 of 5.

QR Code

Allowed/Prohibited to read QR Code



@Y120101

Permission to read QR codes*



@Y120100

Prohibit the reading of QR Code

Data Matrix

Allow/Disallow reading of Data Matrix



@Y220101

Allows reading of the Data Matrix



@Y220100

Disable reading of Data Matrix*

PDF 417

Permission/Disability to read PDF 417



@Y210101

Permission to read PDF 417



@Y210100

PDF 417*

chapter vi. communications instructions

When the scanner is in serial mode, the scanner can be controlled by sending relevant commands to scan or set related functions.

To use command control, first send "command mode" to enter command control mode.

trigger command

Open Scan (HEX): 7E 00 08 01 00 01 02 01 02 DA

Return after success (HEX): 02 00 00 01 00 33 31

Off-scan (HEX): 7E 00 08 01 00 02 02 02 32 B9

Return after success (HEX): 02 00 00 01 00 33 31

Other commonly used commands

1. Permissible Code 128 code (HEX): 7E 00 40 59 10 01 01 F7 57

Disable Code 128 (HEX): 7E 00 40 59 10 01 00 E7 76

2. Permission to read QR code (HEX): 7E 00 40 59 12 01 01 99 37

Prohibited QR Code (HEX): 7E 00 40 59 12 01 00 89 16

3. Inductive mode (HEX): 7E 00 40 59 07 01 02 01 C7

4. Command model (HEX): 7E 00 40 59 07 01 01 31 A4

Command return value

Return after success (HEX): 02 00 00 01 00 33 31

Chapter VII. Appendix

Appendix - Default Settings Table

Parameter Name	default setting	Notes
comprehensive setting		
Setting Code Function	ON	On by default
Decoding Success Beep	ON	
floodlight	ON	
fill light semi-bright	OFF	
Image Inversion	Positive Phase Image Recognition	
communication settings		
interface mode	USB-KBW	
Keyboard Mode	American English	
Keyboard Emulation	OFF	
case sensitive conversion	OFF	Normal
baud	9600	

Serial Checksum	Unchecked
data point	8 places
stop position	1 place
Literacy Mode	
Literacy Mode	perceptual reading
Data editing	
transmission terminator	ON
terminator	ON CR
Bar code parameter setting	
Turn on all barcodes.	OFF
UPC-A	
Allows literacy	ON
UPC-E	
Allows literacy	ON
EAN-8	
Allows literacy	ON

EAN-13

Allows literacy	ON
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ISBN

Allows literacy	OFF
-----------------	-----

Code 128

Allows literacy	ON
-----------------	----

Code 39

Allows literacy	ON
-----------------	----

transmission verification	OFF
---------------------------	-----

MOD 43 Calibration	OFF
--------------------	-----

Code 93

Allows literacy	OFF
-----------------	-----

Interleaved 2 of 5

Allows literacy	ON
-----------------	----

Open the check.	OFF
-----------------	-----

transmission verification	OFF
---------------------------	-----

QR Code

Allows literacy

ON

Data Matrix

Allows literacy

OFF

PDF 417

Allows literacy

OFF