# CT10 Barcode Scanner User Manual

# **IMPORTANT NOTICE**

# **Safety Precaution**

- \* DO NOT disassemble the scanner, or place foreign matter into the scanner cause a short circuit or circuit damage.
- \* DO NOT expose the scanner or battery to any flammable sources.

### **Maintenances Precaution**

- \* Use a clean cloth to wipe dust off the body of the scanner.
- \* If you find the scanner abnormal, write down the specific scenario and consult the maintenance person.

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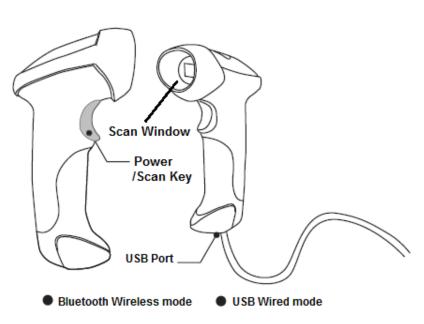
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### **Overview of CT10 Barcode Scanner**

#### Features of the Scanner

- \* Small size, portable.
- \* Supports three scan modes, including Continuous Mode, Manual Mode, Auto-off Mode.
- \* Supports most popular barcode symbologies.
- \* User feedback via LED indicator and beeper
- \* The voice volume of scan barcode successfully could change via setting barcode.
- \* Built-in 128 KB Flash memory can store up to thousand scan barcodes.
- \* Provides 2 KB memory for reserve buffer while Bluetooth connection interrupt, can store up to 110 scan barcodes.
- \* Supports BT SPP.
- \* Supports BT HID.
- \* Programmable parameters include data output format, editing format, symbologies, etc.
- ★ Abundant decoding symbologies
- ★ Whole body shockproof and drop resistance design
- ★ Proprietary intellectual property rights
- ★ Comfortable operating feel
- ★ Button life up to 3 million times
- ★ Support BT standard protocol, no need adaptor
- ★ 1000mAh large capacity lithium battery
- ★ Long working hours

### **Appearance**



# **Introduction of Key Function**



Note: Long press Scan button 3 seconds will turn on the CT10 scanner.

Long press Scan button 3 seconds will turn off the CT10 scanner.

Flip the Scan button can read the barcodes.

# **Specifications**

PHYSICAL CHARACTERISTICS		
Material	ABS+TPU	
Size	Length 167mm*Width 70mm* Height 85.5mm	
Color	White, Black	
Power supply	Built-in rechargeable lithium battery	
Weight	150g (With battery)	
PERFORMANCE CHARACTRISTICS		
Bluetooth class 2.0, Version +EDR		
Interfaces Supported	Multiple Interface with: USB, RS232, PS2 Keyboard	
Interfaces Supported	SPP, HID	
Light Source (Laser)	Laser LED 650+/-20nm	
Sensor	2500 pixels	
Decode Capability	Codabar, Code 11, Code 93, MSI, Code 128, UCC/EAN-128, Code	
	39, EAN-8, EAN-13, UPC-A, ISBN, Industrial 25, Interleaved 25,	

	Standard 25, 2/5 Matrix	
Resolution	5mil	
Nominal Working Distance	6~30cm	
Decode Rate	200 decodes per second	
Scan width	30mm=Scanner Window	
Decode mode	Single-Line Aiming	
Scan mode	Auto off mode / Manual mode	
Print Contrast Minimum	30%	
Scan angles	Roll 30° Pitch 75° Yaw65°	
Cylinder Horizontal Scan	Diameter 35mm	
Indication	Beeper, LED	
Radio Range	10m Visual range	
POWER		
Voltage	DC 5V	
Laser Safety	Accord with national level two laser safety standards	
EMC	CE & FCC DOC Compliance	
standby Current	35mA	
Operating current	60mA	
USER ENVIRONMENT		
Operating Temp.	0 to 50° °C / 32 to 122°F	
Storage Temp.	0 to 50° °C / 32 to 122°F	
Operating Humidity	20-85% (non-condensing)	
Storage Humidity	20-85% (non-condensing)	
Drop Specifications	Free fall of 1.5m air drop	
Accessories	Lithium battery, Charger., Data lines	

# **Correct Aiming**



# **Incorrect Aiming**



# **QUICK START**

The setting of the CT10 Barcode Scanner can be changed by reading the setup barcodes contained in this manual. This section describes the procedure of setting the CT10 Barcode Scanner by reading the setup barcodes and provides some example for demonstration.

#### Steps Action

1 Turn on CT10 Barcode Scanner...

#### Feedback if Successful

It will response with a long beep (high tone), it's LED shows red and with Intmt twinkle.

**Note:** How the CT10 Barcode Scanner establishes a connection with computer or other compatible device, please refer to Chapter 2.

2 Enter the Setting Mode...



Enter Setup

The CT10 Barcode Scanner will response three beeps (tone descending from high to low), and its LED indicator will flashing purple.

3 Read a Setup barcode

The CT10 Barcode Scanner will response three beeps (tone ascending from low to high), and its LED indicator will flashing purple.

For Example:



**Enable Codabar** 

4 Exit the Setting Mode...

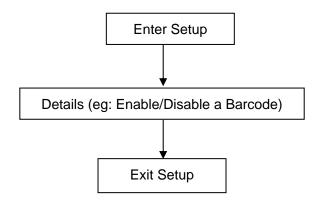
The CT10 Barcode Scanner will response three beeps (tone descending from high to low), and its LED indicator will not flashing purple and power off.



Exit with Save

**Note:** When any setup error occurs, the CT10 Barcode Scanner will respond with a long beep (low tone), and its LED indicator will flashing purple.

#### Steps of Setup:



### **Enter the Setting Mode**

For the scanner to enter the setting mode, you must have it read the "Enter Setup" barcode, which will be located at the bottom of almost every page of this manual. The CT10 Barcode Scanner will respond with three beeps (tone descending from high to low), and its LED indicator becomes purple and go off quickly after reading the barcode.



**Enter Setup** 

For setting scanner parameters, see "Read a Setup Barcode" below.

### **Exit the Setting Mode with Save**

For the scanner to exit the setting mode, you must have it read the "Exit with Save" barcode, which will be located at the bottom of almost every page of this manual. Just like reading the "Enter Setup" barcode, the scanner will respond with three beeps (tone ascending from low to high) after reading the barcode.



Exit with Save

### **Exit the Setting Mode without Save**

If you want to exit the setting mode without saving any changes, you must have the scanner read the "Exit without Save" barcode.

Just like reading the "Enter Setup" barcode, the scanner will respond with three beeps (tone ascending from low to high) after reading the barcode.



Exit without Save

### **Restore Factory Defaults**

"Restore Factory Defaults" is a special barcode. The CT10 Barcode Scanner will respond with a short beep (high tone) after reading this barcode. At this time, the scanner system could restore factory defaults, and no need to read "Exit with Save" barcode again. The Scanner defaults enable HID, PIN defaults 10010.



Restore Factory

**Note:** Most of setting mode have restore factory defaults selection. The factory default value for each setting is indicated by an asterisk "\*".

You could use this barcode at the following status:

- 1. The scanner can not work. For example, it can not read barcodes.
- 2. You forget the settings you did to the scanner before, and you don't want to be affected by the settings when you use the scanner.
- 3. After using a function which is not be used usually in the scanner.

#### **Check Software Version**

If you want to know the software version of CT10, should read the 'Enter Setup' and 'Output Software Version' barcode:





Output Software Version

Checking the software version is done at the enter setup mode, so after output the software version, need to read 'Exit without Save' barcode.



Exit without Save

### **Save Custom Settings**

1. You may change factory defaults, and customize some functions suitable for your own applications when you use CT10, you must read the 'Enter Setup – Function barcode you want to customize – Save Custom Settings – Exit with Save' barcodes.



Enter Setup



Save Custom Settings



Restore Customs Settings



Exit with Save

2. If you want to restore to custom settings after resetting the barcode scanner, just need to read 'Enter Setup – Restore Custom Settings – Exit with Save' barcodes as above.

# **Chapter 1 Features and Basic Setups**

This chapter will introduce the features and usage of the barcode scanner.

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# 1.1 Battery

The scanner is powered by 1500mAh chargeable Lithium batteries. The batteries can support the scanner work continuous for 60 hours, or read 56000 barcodes (read an EAN-13 barcode per 5s).

# 1.1.1 Mounting the battery (charging)

- 1) Hold the scanner face down in one hand.
- 2) Insert USB cable for charging.

### 1.1.2 How to operate CT10 Barcode Scanner



#### Turn on the scanner

Press the Power key for about 2 seconds. The scanner will respond with a long beep (high tone), and its LED indicator is flashing.

#### Turn off the scanner

Press the Power key for about 3 seconds. The scanner will respond with two short beeps (high tone) and the LED indicator is turn off.

#### 1.1.3 Auto Power Off

In order to conserve battery power, the user can specify the time interval for the scanner to automatically turn off. By default, it is set to 10 minutes.



Enter Auto Power Off



5min



(\*) 10min



20min



30min



Exit Auto Power Off

For example: Set 20 minutes for the scanner to automatically turn off.

- Read the "Enter Setup" barcode;
- 2. Read the "Enter Auto Power Off" barcode;
- 3. Read the "20min" barcode:
- Read the "Exit with Save" barcode.

**Note:** If you want to keep the scanner power on all the time, read "Exit Auto Power Off" in stead of step 3 and 4.



**Enter Setup** 



Exit with Save



Exit without Save

#### 1.2 Transmit Buffer

During the Bluetooth connection, the CT10 Scanner uses a 16KB memory as a data buffer, and sends the collected data to the host computer one by one via the Bluetooth. Upon reading a barcode successfully, the scanner responds with one short beep and its LED indicator becomes green and goes off quickly. However, the host computer may not receive the data immediately if getting out of range. With the 16KB transmit buffer, the scanner can ignore the transmission status and keep on reading barcodes until the buffer is full. When the buffer is full, the scanner will respond with a long beep (low tone), this reminds the user that the space of buffer is not enough and can not read barcode any more. @ Once the Buffer is full, the user should return to the range of BT connection quickly, the data in the buffer can be sent back to the host computer and release the space of buffer.

**Note:** The 16KB transmit buffer on the scanner can hold as many as 1300 barcodes bases on Code128. You can choose to clear the data in the buffer every time when you turn on the scanner.



Enable Clear Data in Buffer When Turn On the Scanner



\*Disable Clear Data in Buffer When Turn On the Scanner

**Note:** You can clear the data in the buffer via enable barcode, you can also clear the data in the buffer via press the Power key long time.

After the Bluetooth connect successfully, the barcodes in the buffer will upload to appointed position automatically. You also can setup upload the barcodes in the buffer or not via read the following barcodes. By default, it is enabled.

If you don't want to upload the barcodes automatically, you can setup as disabled, when the Bluetooth connect, the barcodes won't upload. You can double click Power key to start upload the barcodes.



(\*) Enable Auto Uploading



Disable Auto Uploading



**Enter Setup** 



Exit with Save



Exit without Save

### 1.2.1 Inventory Mode

If you want to keep the barcodes in the buffer of CT10 for multiple uploading, you can choose inventory mode. In inventory mode, CT10 will count the number of the barcodes automatically, and control the time, position etc. for uploading. Also, you can clear the barcodes in the buffer after uploading. Following is the setup method:

1) Read 'Enter Inventory Mode' barcode to enter into the inventory mode



**Enter Inventory Mode** 

2) If you want to recover to normal mode, read the 'Enter Normal Mode' barcode



**Enter Normal Mode** 

 Read the 'Clear the barcodes in the buffer' barcode to clear the barcodes (only suitable for inventory mode)



Clear the barcodes in the buffer

 Read 'Data Uploading' barcode to upload the barcodes in the buffer (only suitable for inventory mode)



**Data Uploading** 

5) Read 'Upload Counting' barcode to count the number of the barcodes (only suitable for inventory mode)



**Upload Counting** 

**Note:** Inventory function can be used under any scan mode mentioned in 1.5.

# 1.3 LED Indicator

The LED indicators on CT10 can help the user know about the current operation status.

Color of LED Indicator	Meaning	
Green LED on and off quickly	Good Read, with one short beep (high tone)	
Green LED on Every 5s	Indicates the CT10 Scanner in Memory Mode	
Purple, Flashing(On/Off ratio 1:1)	Indicates the CT10 Scanner in Setting mode	
Blue, Flashing (On/Off ratio 1:1)	Indicates the BT is waiting for connection, the CT10	
	stores the address of BT which connects with the last	
	time.	
	Indicates the CT10 Scanner is out of range or can not	
	establish connection with BT, with two short	
	beeps(high-low tone)	
Blue, Flashing (On/Off ratio	Indicates the CT10 Scanner establish a BT	
20ms:3s)	connection successfully, with two short beeps	
	(low-high tone).	
	Indicates the CT10 Scanner reconnect with BT, with	
	two short beeps (low-high tone).	
Red, Flashing (On/Off ratio 1:1)	Indicates the CT10 Scanner has no address of BT	
	which connects with before. The default BT connect	
	interface is HID, the PIN code is 10010.	

# 1.4 Beeper

The beeper built in CT10 can help the user know about the current operation status.

Beeping	Meaning	
One long beep, high tone	Power on. If the scanner has no BT address which could connect with, flashing red. If the scanner has BT address	
	which could connect with, flashing blue.	
One short beep, high tone	Read barcode, with green LED on and off quickly	
One long been low tone	Configuration error, with purple flashing;	
One long beep, low tone	Or transmit buffer full, with green LED on and off quickly	
Two short beeps, high tone	Power off.	
Two short beeps, low-high	BT connection established, with blue LED flashing (On/Off	
tone	ratio 20ms:3s).	
Two short beeps, high-low	BT connection out of range or suspended, with blue LED	
tone	flashing (On/Off ratio 1:1).	
Three short beeps, tone	Enter or Exit Setting mode, with purple LED flashing.	
descending from high to low		
Three short beeps, tone	Configuration correct, with purple LED flashing;	
ascending from low to high		

# 1.4.1 Beeper Volume



Mute



(\*) Medium Volume

Minimum Volume



Maximum Volume

For example: Set Minimum Volume for beeper.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Minimum Volume" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

### 1.5 Scan Modes

Four kinds of scan modes are supported by the CT10 Barcode Scanner:

### 1.5.1 Manual Mode

By default, the scan mode is set to Manual Mode. If the user keeps press the Scan Key, the CT10 Scanner will emit a red light line. This indicates the scanner could scan, the scanning will not stop until the scanner under the following situation.

- \* Read a barcode successfully;
- \* Release the Scan Key.

Manual Mode



**Enter Setup** 



Exit with Save



Exit without Save

### 1.5.2 Continuous Mode

When you active the "Continuous Mode", you don't need to trigger the "Scan Key". After a successful decoding, the removal of barcode is required. It is not allowed to proceed to decode until the decoding delay time has passed. To decode the same barcode repeatedly, move away the barcode and put it back again and again for scanning.



Continuous Mode

Set the time interval between each decoding for Continuous Mode.



Setup Delay between Re-read



**Enter Setup** 



Exit with Save



Exit without Save

# 1.5.3 Auto Power Off Mode



(\*)Auto Power Off Mode



Setup Auto Power Off Time



**Enter Setup** 



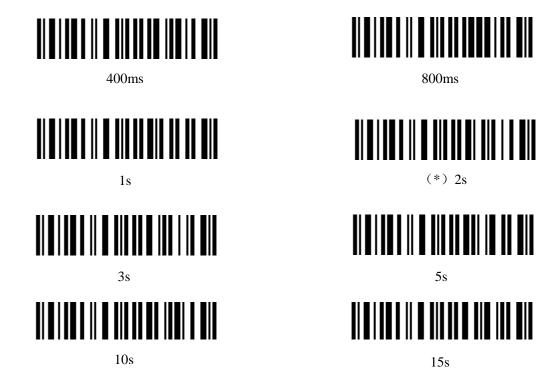
Exit with Save



Exit without Save

#### **Delay Between Re-Read**

The delay time between re-read of above scan modes could be set by the following barcode.



For Example: 1. Read the "Enter Setup" barcode;

- 2. Read the "Auto Power off Mode" barcode;
- 3. Read the "1s" of the time interval between each scanning barcode;
- 4. Read the "Exit with Save" barcode.

Then enter the Auto Power Off Mode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 1.5.4 Auto-induction Mode

Under the Auto-induction Mode. The users just need to move the barcodes to be scanned in front of the light band of CT10, no need press the Scan Key, there will show a red light line. This indicates the scanner could scan, the scanning will not stop until the scanner under the following situation.

<sup>\*</sup>The pre-set timeout expires (the default time is 2s).



**Auto-induction Mode** 

You also can setup the best auto-induction distance according to actual demand, read the following barcode for setup.



Setup Auto-induction Distance

For Example: 1. Read the "Enter Setup" barcode;

- 2. Read the "Auto-induction Mode" barcode;
- 3. Read the "Setup Auto-induction Distance";
- 4. Read the numeric barcode in Appendix I; (0 means farthest, 9 means nearest)
- 4. Read the "Exit with Save" barcode.

Then enter the Auto-induction Mode.



**Enter Setup** 



Exit with Save



Exit without Save

<sup>\*</sup> Read a barcode successfully;

# 1.6 Symbologies Supported

Most of the popular barcode symbologies are supported by the CT10 Scanner, as listed below. Refer to Chapter 4 for details of each symbology.

Symbologies Supported: Enable/Disable		Pre-Set	
Codabar			Disable
Code 11			Disable
Code 93			Disable
MSI			Disable
Code 128		Enable	
UCC/EAN-128		Enable	
Code 39		Enable	
EAN/UPC	EAN-8		Disable
	EAN-13	Enable	
	UPC-A	Enable	
	UPC-E	Enable	
	ISBN		Disable
Code 2 of 5	Industrial 25		Disable
	Interleaved 25		Disable
	Standard 25		Disable
	2/5 Matrix		Disable

### 1.7 USB Wired Data Transmission

CT10 Barcode Scanner support USB Data live transmission. The user just need connect one end of the USB cable to a device with USB2.0 port, and the other end to CT10, open a textbox, it will enter data transmission. USB wired transmission is the prior transmission mode.

# **Chapter 2 How to Connect with BT**

- 1. Make CT10 full charged, press Power key. If the scanner never connected with the computer before, it will responds with a beep, and flashing red.
- 2. Have the scanner read the "Enter Setup" barcode to enter the setting mode.
- 3. Have the scanner read the associated barcode to activate the BT connection interface.
- 4. Have the scanner read the barcodes for related settings.
- 5. Have the scanner read the barcode to exit the setting mode.
- 6. The CT10 Scanner will stay active for 1 minute waiting for a connection request from the host(SPP) or trying to connect to the host(HID).

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# 2.1. Select Output Interface

Either SPP or HID can be chosen depending on the need.

### 2.1.1 BT SPP Mode

If you select the output interface of BT SPP, you may run HyperTerminal.exe or serial port tool to collect the scanned data.



**Enable SPP** 

You can setup SPP data batch upload or single upload according to your requirements.



SPP Data Batch Upload



SPP Data Single Upload

#### **2.1.2 BT HID Mode**

By default, BT HID is activated on the CT10 Scanner, and the keyboard type is set to PCAT (US).



(\*) Enable HID



**Enter Setup** 



Exit with Save



Exit without Save

### 2.2 Setting up a BT connection

Specify the PIN Code, if you choose "The Default Value 1", the passkey for setting up a BT connection is 10010; If you choose "The Default Value 2", the passkey for setting up a BT connection is 40510.

For security concerns, the user can also specify a unique PIN code.

- 1. Read the "Enter PIN Code" barcode;
- 2. Read the setting barcodes of parameters' value in APPENDIX ONE, if the scanner read the setting barcodes 1, 5, 1, 5 in order, it means the PIN code is 151515.

10010



(\*) Default Value 1

40510



Default Value 2



Enter PIN Code



Random PIN Code

Refer to APPENDIX I.

**Note:** Before the CT10 Scanner connects with the other devices, the user should pre-set the scanner.

For example: The CT10 Scanner is trying to connect with a host computer, the setting operation is according to the following steps:

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable SPP" barcode;
- 3. Read the "Default Value 1"(PIN code is 10010);
- 4. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

### 2.3 Connect to PC via BT

Steps: Turn on Bluetooth of your computer (take Win7 as example)

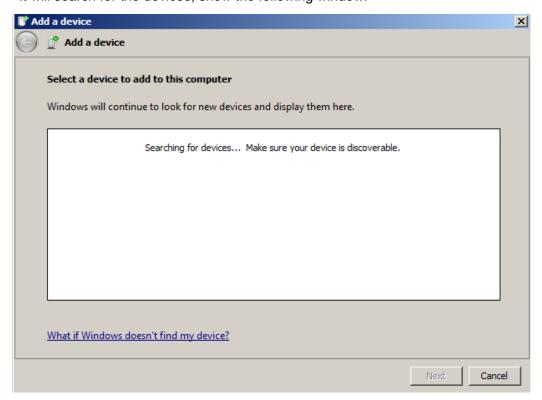
(Note: If your computer without Bluetooth, you should prepare a Bluetooth Adapter, Insert the adapter to USB port)



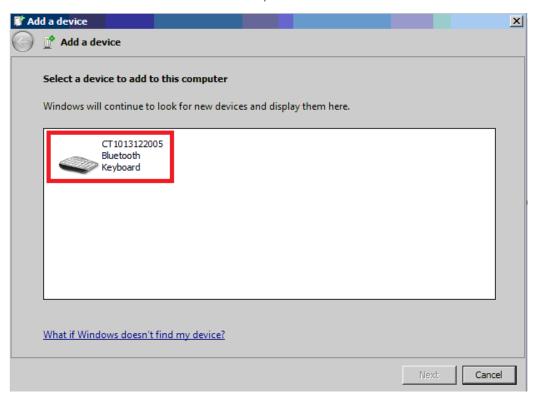
Click 'Add a Device',



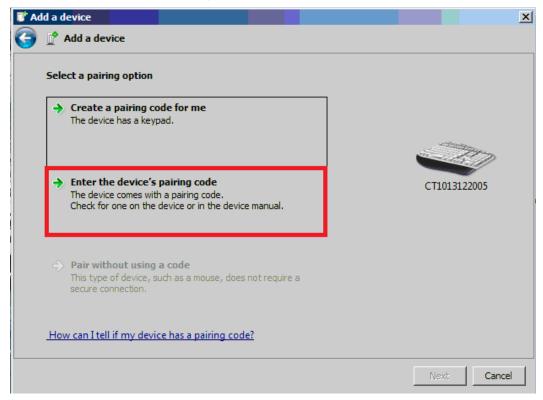
It will search for the devices, show the following window:



The computer will search Bluetooth devices automatically. A few seconds later, you will find CT10 in the available devices list, click 'Next'



> Select 'Enter the device's pairing code', and click 'Next'.



Input the pairing code 10010, and click 'Next'



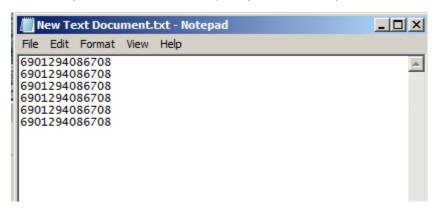
> You can find a prompting at the lower right corner of your computer desktop, as following.



After around 5 seconds, you will hear a beep from CT10, and the indicator from red to blue. Then connect successfully.

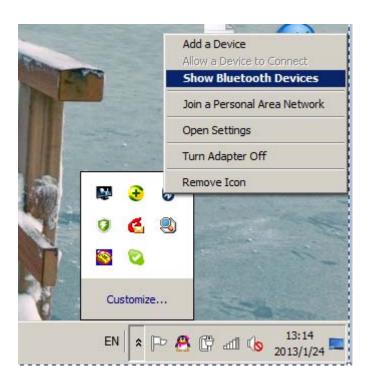


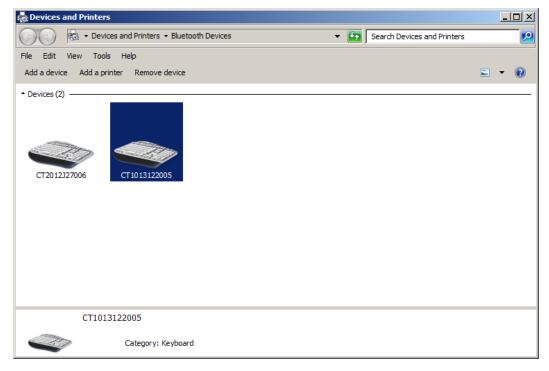
You can open a editable textbox (Notepad, word etc.), and read the barcodes.



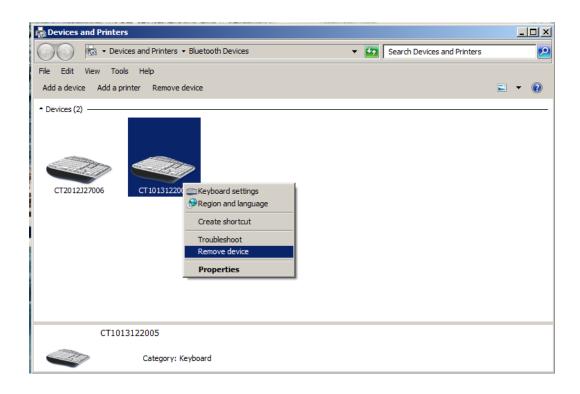
(**Note:** After pairing successfully, open Bluetooth Chat, then you can read the barcodes in SPP mode.)

Now, you click 'Show Bluetooth Devices', you can find the CT10 in Devices and Printers.





If you want to change PIN code or switch output interface, you must remove the paired CT10 on the computer first.



**Note:** CT10 default mode is HID Mode, if you want to use SPP mode, just read following barcodes before pairing, other operations is same as HID mode.

### 2.4 Connect to PDA via BT

PDA is trying to connect to the CT10 Scanner (BT SPP).

- 1. Press the Power key and turn on the CT10 Scanner with correct BT settings, such as setting up SPP as BT transmit interface, and BT PIN code specified, etc.
- 2. Find the BT icon on PDA, and double-click.



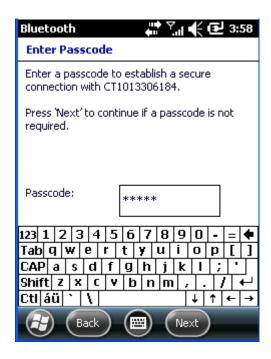
3. Click [Add New Device].



4. Choose "CT10", click [Next].



5. Enter the PIN Code. When setting up a BT connection, if you choose "The Default Value 1", input 10010; If you choose "The Default Value 2", input 40510; if you specified a unique PIN code on your own, input it. Click [Next].



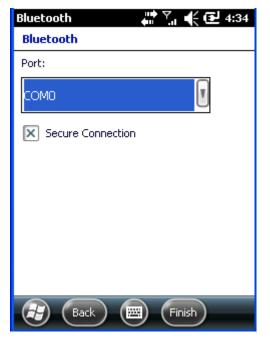
6. Click [Finish]. Click [New Transmit Port] in [COM port].





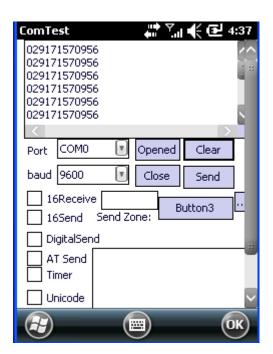
7. Choose port number for added device. [COM0] is chosen here. Click [OK].







8. Enter serial port application, choose the port number you just set, click [open]. The CT10 Scanner respond with two short beeps, and the indicator is flashing blue (On/Off ratio 20ms:3s), indicating the connection between PDA and CT10 is established successfully.



# 2.4.1 One-click Android Connection

1. Turn on CT10, read the following barcodes continuously



Enter Setup



One-click android connection

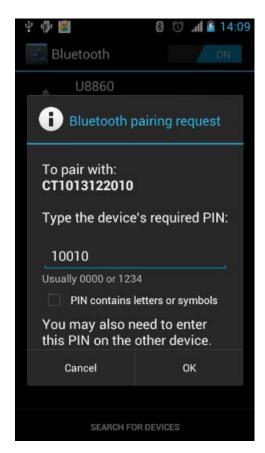


Exit with Save

- 2. Bluetooth Pairing
- > Turn on Bluetooth in your android device, search CT10 in available devices, and click



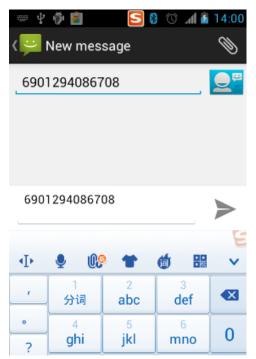
➤ It will popup Bluetooth pairing request dialog, input the PIN code 10010



➤ Click OK, you will hear a beep from CT10, that means pairing successfully, you can find paired CT10 on the android device.



Open a textbox, for example short message, the CT10 can read barcodes into the textbox.



# 2.4.2 One-click iOS Connection

1. Turn on CT10, and read the following barcodes continuously



Enter Setup



One-click iOS Connection



Exit with Save

- 2. Bluetooth Pairing
- > Turn on Bluetooth in your ios device, search CT10 in available devices, and click



It will popup Bluetooth pairing request dialog, and show the PIN code



Find above mentioned numbers in following barcodes, read them continuously, and then read 'Exit without Save' barcode



Exit without Save

You will hear a beep from CT10 if connect successfully, and it will show in the paired devices on iOS device.



#### 3. Active or Hide the Input Method

During the scanning, you may use the soft keypad if you want to add remark information, you just need double click Power key quickly, it will active the soft keypad. If you double click Power key quickly again, the soft keypad will hide. It is shown as following:





# 2.4.3 Connect via BT Input Method

- 1. Turn on Bluetooth barcode scanner CT10 or CT20 for setup
- 1) Read 'Enter Setup' barcode



Enter Setup

2) Read 'Bluetooth Input Method' barcode



Bluetooth Input Method

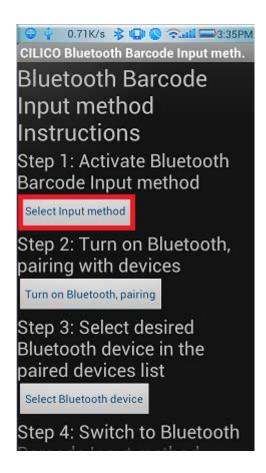
3) Read 'Exit with Save' barcode



Exit with Save

2. Setup 'CILICO Bluetooth barcode input method'

Step 1: Tap 'Select Input Method'

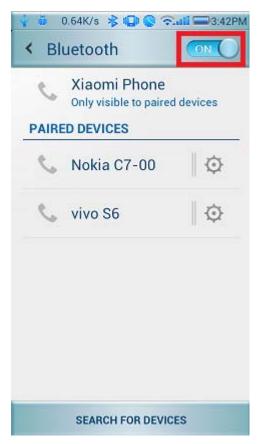


Select Cilico Bluetooth Input method (support Chinese, English and Japanese)



Step 2: Bluetooth Pairing

Turn on Bluetooth



Click 'Search for devices', and will find CT10/CT20 in available devices



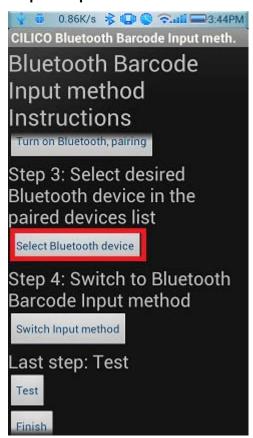
Click for pairing, and input the PIN code in following window, then click OK.



You will find CT10/CT20 in Paired Devices if pairing successfully.



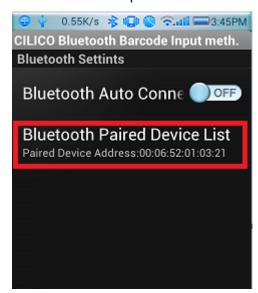
Step 3: Tap 'Select Bluetooth device'



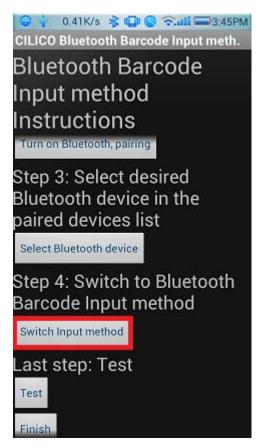
Click CT10/CT20 in Bluetooth Paired Device List, it will connect automatically



You will hear a beep if connect successfully



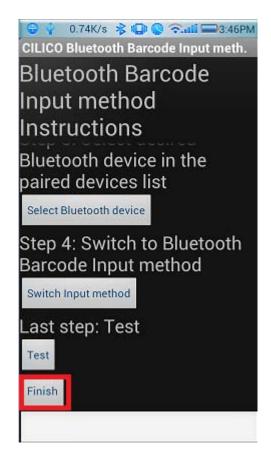
Step 4: Tap 'Switch Input Method'



Select Cilico Bluetooth Input method (support Chinese, English and Japanese), the user can choose according to their requirement



Step 5: Tap 'Finish'



Step 6: Open a editable textbox, then can read the barcodes



Switch to Chinese input method



#### Switch to English input method



#### Switch to Japanese input method



# **Chapter 3 SYMBOLOGY SETTINGS**

In this chapter, a brief on the symbology setting is provided for your reference.

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## 3.1 CODABAR

Decide whether or not to enable Codabar. The CT10 Scanner defaults disable Codabar.



Enable Codabar



(\*) Disable Codabar

**Note:** Read the "Disable Codabar" barcode will make the scanner can not read the Codabar barcode. Thus, if the scanner can not read the Codabar barcode, please trying to read "Enable Codabar" to reset.

For example: Enable Codabar.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Codabar" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

## 3.2 CODE 25 -INDUSTRIAL25

Decide whether or not to enable Industrial 25. The CT10 Scanner defaults disable Industrial 25.



**Enable Industrial25** 



(\*) Disable Industrial25

**Note:** Read the "Disable Industrial 25" barcode will make the scanner can not read the Industrial 25 barcode. Thus, if the scanner can not read the Industrial 25 barcode, please trying to read "Enable Industrial 25" to reset.

For example: Enable Industrial 25.

- 1. Read the "Enter Setup" barcode.
- 2. Read the "Enable Industrial 25" barcode.
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

## 3.3 CODE 25 -INTERLEAVED 25

Decide whether or not to enable Interleaved 25. The CT10 Scanner defaults disable Interleaved 25.



Enable Interleaved 25



(\*) Disable Interleaved

**Note:** Read the "Disable Interleaved 25" barcode will make the scanner can not read the Interleaved 25 barcode. Thus, if the scanner can not read the Interleaved 25 barcode, please trying to read "Enable Interleaved 25" to reset.

For example: Enable Interleaved 25.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Interleaved 25" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

## 3.4 CODE 25 -MATRIX 25

Decide whether or not to enable Matrix 25. The CT10 Scanner defaults disable Matrix 25



Enable Matrix 25



(\*) Disable Matrix 25

**Note:** Read the "Disable Matrix 25" barcode will make the scanner can not read the Matrix 25 barcode. Thus, if the scanner can not read the Matrix 25 barcode, please trying to read "Enable Matrix 25" to reset.

For example: Enable Matrix 25.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Matrix 25" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

## 3.5 CODE 25-STANDARD 25

Decide whether or not to enable Standard 25. The CT10 Scanner defaults disable Standard 25.



**Enable Standard 25** 



(\*) Disable Standard 25

**Note:** Read the "Disable Standard 25" barcode will make the scanner can not read the Standard 25 barcode. Thus, if the scanner can not read the Standard 25 barcode, please trying to read "Enable Standard 25" to reset.

For Example: Enable Standard 25.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Standard 25" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.6 CODE 39

#### 3.6.1 Enable/Disable Code 39

Decide whether or not to enable Code 39, The CT10 Scanner defaults disable Code 39.



(\*) Enable Code 39



Disable Code 39

#### 3.6.2 START/STOP Transmission

Decide whether or not to include the start/stop characters in the data being transmitted.



\*Transmit Code 39 Start/Stop Characters



\*Do Not Transmit Code 39 Start/Stop Characters

For example: Do Not Transmit Code 39 Start/Stop Characters.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Code 39" barcode; (If Code 39is disabled, it is need to set);
- 3. Read the "Do Not Transmit Code 39 Start/Stop Characters" barcode;
- 4. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.6.3 Checksum Verification

It is not enforced to include the checksum character in the Code 39 data. If checksum character is included, it should be the last character of the barcode data. Checksum character is a calculate value bases on all of the data, and is used to check the data is correct or not.

Thus, if the scanner is set to "Do Not Verify", and the scanner will output all the barcode data.

If the scanner is set to "Verify without Output Checksum Character", and the scanner will check the data bases on the last character of the barcode data. If the check passes, the scanner will output the data without the checksum character; if the check not passes, the scanner will display read failure.

If the scanner is set to "Verify with Output Checksum Character", and the scanner will check the data bases on the last character of the barcode data. If the check pass, the scanner will output the data with the checksum character; if the check not pass, the scanner will display read failure.



\*Do Not Verify



Verify without Output Checksum Character



Verify with Output Checksum Character

#### 3.6.4 STANDARD/FULL ASCII CODE 39

Decide whether or not to support Code 39 Full ASCII that includes all the alphanumeric and special character. The CT10 Scanner defaults full ASCII Code 39. It could disable full ASCII Code 39 via set.



Disable Code39 Full ASCII



\* Enable Code39 Full ASCII



**Enter Setup** 



Exit with Save



Exit without Save

## 3.7 CODE 93

Decide whether or not to enable Code 93. The CT10 Scanner defaults disable Code 93.



Enable Code93



(\*) Disable Code93

**Note:** Read the "Disable Code 93" barcode will make the scanner can not read the Code 93 barcode. Thus, if the scanner can not read the Code 93 barcode, please trying to read "Enable Code 93" to reset.

For Example: Enable Code 93.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Code 93" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.8 Code 128

Decide whether or not to enable Code 128. The CT10 Scanner defaults enable Code 128.



(\*) Enable Code128



Disable Code128

**Note:** Read the "Disable Code 128" barcode will make the scanner can not read the Code 128 barcode. Thus, if the scanner can not read the Code 128 barcode, please trying to read "Enable Code 128" to reset.

For Example: Disable Code 128

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Disable Code 128" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.9 EAN-8

#### 3.9.1 Enable/Disable EAN-8

Decide whether or not to enable EAN-8. The CT10 Scanner defaults enable EAN-8.



(\*) Enable EAN-8



Disable EAN-8

#### 3.9.2 Convert to EAN-13

There is two ways for EAN-8 to change, convert to EAN-13, or add "0" ahead of EAN-8, and the EAN-8 ID is not change.

Decide whether or not to convert to EAN-13, if EAN-8 convert to EAN-13, it will be read as same as EAN-13. If add a "0" ahead of EAN-8, and the EAN-8 ID is not change, the output ID is still EAN-8 ID.



Convert to EAN-13



Add "0" ahead and ID is not change



(\*) Do not Convert



**Enter Setup** 



Exit with Save



Exit without Save

## 3.9.3 Checksum Transmission

Decide whether or not to transmit Checksum.



\*Transmit EAN-8 Checksum



Do Not Transmit EAN-8 Checksum

For example: Enable EAN-8, and Convert to EAN-13.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable EAN-8" barcode;
- 3. Read the "Convert to EAN-13" barcode;
- 4. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

# 3.10 EAN-13

## 3.10.1 Enable/Disable EAN-13

Decide whether or not to read EAN-13. The CT10 Scanner defaults enable EAN-13.



(\*) Enable EAN-13



Disable EAN-13

# 3.10.2 Convert to ISBN

Decide whether or not to convert the EAN-13 to ISBN.



Convert EAN-13 to ISBN



\* Do Not Convert EAN-13 to ISBN



**Enter Setup** 



Exit with Save



Exit without Save

## 3.10.3 Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



\*Transmit EAN-13 Checksum



Do Not Transmit EAN-13 Checksum

For example: Convert EAN-13 to ISBN.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Convert EAN-13 to ISBN" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.11 UPC-A

## 3.11.1 UPC-A Output '0'

Decide whether or not to add "0" in the output of UPC-A data.



UPC-A Output '0'



\*UPC-A Do Not Output "0"

#### 3.11.2 UPC-A Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



\*Transmit UPC-A Checksum



Do Not Transmit UPC-A Checksum

For example: UPC-A Output "0", Do Not Transmit UPC-A Checksum.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "UPC-A Output "0"" barcode;
- 3. Read the "Do Not Transmit UPC-A Checksum" barcode:
- 4. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.12 UPC-E

#### 3.12.1 Enable/Disable UPC-E

Decide whether or not to enable UPC-E. The CT10 Scanner defaults enable UPC-E.



(\*) Enable UPC-E



Disable UPC-E

## 3.12.2 UPC-E Checksum Transmission

Decide whether or not to include the checksum character in the data being transmitted.



\*Transmit UPC-E Checksum



Do Not Transmit UPC-E Checksum

For example: Do Not Transmit UPC-E Checksum

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable UPC-E" barcode;
- 3. Read the "Do Not Transmit UPC-E Checksum" barcode;
- 4. Read the "Exit with Save" barcode.



**Enter Setup** 



Enter with Save



**Enter without Save** 

## 3.13 MSI

Decide whether or not to enable MSI. The CT10 Scanner defaults disable MSI.



Enable MSI



(\*) Disable MSI

**Note:** Read the "Disable MSI" barcode will make the scanner can not read the MSI barcode. Thus, if the scanner can not read the MSI barcode, please trying to read "Enable MSI" to reset.

For example: Enable MSI.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable MSI" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

#### 3.14 CODE 11

Decide whether or not to enable Code 11. The CT10 Scanner defaults disable Code 11.



Enable Code11



(\*) Disable Code11

**Note:** Read the "Disable Code 11" barcode will make the scanner can not read the Code 11 barcode. Thus, if the scanner can not read the Code 11 barcode, please trying to read "Enable Code 11" to reset.

For example: Enable Code 11.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Enable Code 11" barcode;
- 3. Read the "Exit with Save" barcode.



**Enter Setup** 



Exit with Save



Exit without Save

# **Chapter 4 DEFINING OUTPUT FORMAT**

Before data transmission to the host or device, you can pre-process the data and decide the format of the data transfer.

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## 4.1 CODE ID

#### Code ID List

Code Type	Code ID	Hex Value
Codabar	a	61
Code 39	b	62
UPC-E	С	63
EAN-13	d	64
Interleaved 2 of 5 (ITF)	e	65
Code 2 of 5 (Standard)	f	66
MSI	g	67
Code 11	h	68
Code 93	i	69
Code 128	j	6A
Matrix 2 of 5	m	6D
2/5 Industrial	n	6E
EAN-8	0	6F
ISBN	k	6B
UPC-A	1	6C

Decide whether or not to add Code ID in the barcode data of output.



Apply Output ID



(\*) Ignore Output ID

For example: Apply Output ID

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Output ID" barcode;
- 3. Read the "Exit with Save" barcode;



**Enter Setup** 



Exit with Save



Exit without Save

# 4.2 Suffix Code of Barcode Settings

Decide whether or not to apply Enter for suffix of barcode data.



(\*) Apply Enter for suffix



Do not Apply Enter for suffix

Decide whether or not to apply Alt to suffix of barcode data.



 $(*) \ \, \mathsf{Apply} \, \mathsf{Alt} \, \mathsf{for} \, \mathsf{suffix}$ 



Do not Apply Alt for Suffix

For example: Do not Apply Enter for suffix.

- 1. Read the "Enter Setup" barcode;
- 2. Read the "Do not Apply Enter for suffix" barcode;
- 3. Read the "Exit with Save" barcode.



Enter Setup



Exit with Save



Exit without Save

# **APPENDIX I**

The setting barcodes of parameters' value.

