



CT80 User Manual

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1 Function Introduction

1.1 Four Transmission Mode

2.4 G wireless, BLE wireless, USB keyboard, USB serial port

1.2 Chinese Transmission

2.4G wireless Chinese transmission, USB HID Chinese transmission

1.3 Flash Memory

2MB flash memory, can store more than 100,000 pieces of data offline.

2 Quick Start

2.1 Power On

Press CT80 scan key 2 seconds,the light on for 4 seconds, and CT80 will beep for finishing power on.

Note: Before CT80 finish power on,the scan key do not operate any scan.

2.2 Indication

2.2.1 LED Indication

LED Indicators

Indicator light color	Indication
Red light	Charging indicator light,red light on when charging and off when full charge
Blue light flash	Barcode scanner in BLE mode, can connect with Android and Apple facility.
Blue light keep on	Already connected with Android or Apple facility
Green light flashing	Barcode scanner in 2.4 mode
Green light keep on	Already connected with 2.4G mode

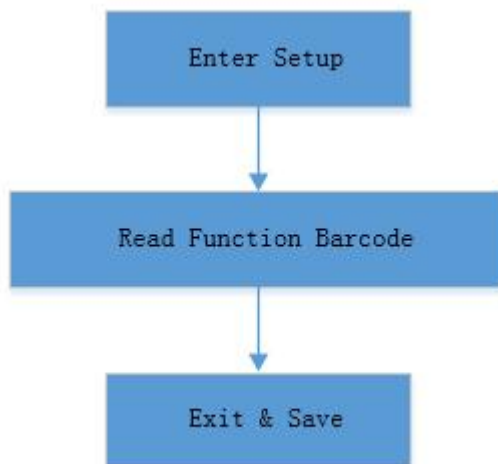
2.2.2 Indication

Beeping

One short beep (high tone)	Reading barcode
One long beep (low tone)	Setting error or buffer memory full
Two short beeps (high tone)	Power off
Three short beep(high-middle-low tone)	Enter or exit setting
Three short beep(low-middle high tone)	Power on

2.3 Function Setup

CT80 Function setup methods as below:



2.4 Enter Setup

Scan "Enter Setup" barcode enter into setting mode, CT80 will have three beeps (high-middle-low tone)



Enter Setup

2.5 Read Function Barcode

Scan function barcode, such as "Enable Auto Upload", CT80 will have three beeps (high-middle-low tone)

(*) Enable Auto Upload



2.6 Exit & Save

Scan "Exit & Save" to exit and save setup mode, CT80 will have three beeps (high-middle-low tone)



Exit & Save

2.7 Exit without Save

Scan "Exit without Save" to exit and no saving setup mode, CT80 will have three beeps (high-middle-low tone)



Exit without Save

2.8 Power off

In normal working situation, press scan button 3 seconds,CT80 power off with two beeps.

Attention: 1. Under setup mode,if user scan a normal barcode (not function setup barcode),CT80 will beep with a low long tone(means nonsense setup function barcode) while blue and green light flashing. 2. If exit setup mode,when CT80 scan function barcode,the barcode will upload as a normal barcode.(except Inventory Mode,exit Inventory mode,Output software version number etc...)

3 Function Setup

3.1 Language Setting

CT80 supports multiple languages switching. Scan 'Enter Setup' – 'Language barcode' – 'Exit & Save'. And set PC with the corresponding language.

US Keyboard



German Keyboard



French Keyboard



Italian Keyboard



Spanish Keyboard



3.2 Factory Reset

Scan "Enter Setup" – "Factory Reset" – "Exit & Save", CT80 will have a short beep (high tone) after successfully setting.

Factory Reset



3.3 Auto Power Off

In order to save power, the automatic shutdown time can be set, preset for 5minutes automatic shutdown. For example : Set the automatic shutdown time to be 10minutes.

Scan "Enter Setup" – "Enable Auto Power Off" – "10 min" – "Exit with Save" to complete auto power off . Other time settings are in the same way .

Tip: If you want scanner to stay power on, just change the third step to "Exit Auto Power Off"



Enable Auto Power Off



(*) 5min



10min



20min



30min



Exit Auto Power Off

3.4 Boot with Memory Clear

If this function enabled, the memory will be cleared after CT80 is powered on.

San"Enter Setup" –"Boot with Memory Clear" –"Exit with Save" to complete booting with memory clear. Settings of "Disable Boot with Memory Clear" are in the same way.

Boot with Memory Clear

(*) Disable Boot with Memory Clear



3.5 Offline Storage

CT80 can store the scanned data automatically when disconnected. When data connected, the stored data will automatically upload. (see section 3.6 Automatically Upload).

Scan "Enter Setup"–"Enable Saving Data" –"Exit with Save", to complete saving data. Settings of "Disable Saving Data" are in the same way.

(*) Enable Saving Data

Disable Saving Data



3.6 Auto Upload

When data connected successfully, the buffering barcode will automatically upload to the specific place, device factory default "automatically upload", you can setup whether to upload the buffering barcode automatically after booting by the following bar codes.

If you do not want Auto Upload after connected, can be set to "Disable Auto Upload", when data connected successfully, buffering barcode can not upload automatically, but the data is stored in the CT80 memory.

Scan "Enter Setup" –"Enable Auto Upload" –"Exit with Save" to complete auto setup. The settings of "Disable Auto Upload" are in the same way.

(*) Enable Auto Setup

Disable Auto Setup

Enable Auto Upload



Disable Auto Upload



3.7 Suffix Setting

CT80 supports special character setting at barcode end, scan "Enter Setup" - "end tab" - "Exit with Save" to complete the special character settings. Other special characters are set in the same way.

(*) End Line Feed

(*) End TAB

End TAB + Line Feed



End TAB+TAB



Delete the Line Feed



3.8 Software Version Number

Software version number can be viewed by scanning "Software Version Number"

Output the software version number



4 Transmission Mode & Priority

CT80 supports 4 transmission modes, USB keyboard, USB serial port, 2.4 G wireless and BLE wireless.

1. USB transmission is the highest transmission grade, so data transmission through USB mode for priority. Dual wireless 2D barcode scanner can auto identify the USB connection status.

- USB keyboard mode : USB data cable connection
- USB gorge line mode: USB data cable connection, USB serial port corresponding virtual com is opened.

2. 2.4G wireless and BLE wireless can switch through barcode set up. The wireless grade is lower than USB wired, that's to say, wireless and wired connected at the same time, data first pass USB mode transmission.

5 USB Transmission

5.1 USB Mode Switch

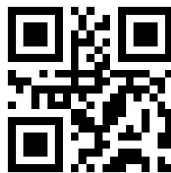
CT80 supports USB keyboard and USB serial port two modes, factory default is USB keyboard. If you need use serial port mode, please scan "Enter Setup"- "USB serial port"- "Exit & save". Same way switch to "USB keyboard".

Attention: when USB mode switch, scanner will auto shut off. You need re-start up, re-connect USB data cable.

Function set up as below:



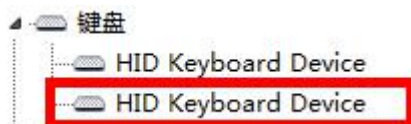
USB Keyboard



USB Serial Port

5.2 USB Keyboard Transmission

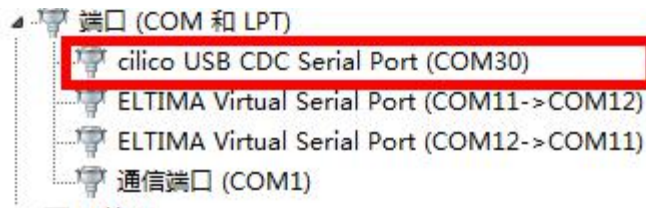
You could switch USB to "USB keyboard" mode(factory default) by reference for the chapter "USD mode switch", then connect USB cable with PC. At this moment, there will appear a USB keyboard device in PC "device manager" as below:



After appear above photo,you could scan bar code,the data will transmit to PC by USB cable

5.3 USB Serial Port Transmission

You could switch USB to "USB serial port" mode by reference for the chapter "USB mode switch",then connect USB cable with PC.(remark:when the first connection,remind to install drive,you need install manufacturer supporting USB serial port drive).At this moment,there will appear a COM port in PC "device manager" as below:



When appear above photo,that`s mean PC have ready recognized USB serial port correctly,you could use serial port tool to open the corresponding COM port,now the scanner data will be sent to PC through USB virtual serial port .

Remark:USB serial port mode are generally used for the secondary development mode.

6 Keyboard Transmission

6.1 Enable 2.4G Wireless Mode

CT80 supports 2.4G wireless data transmission, factory default 2.4G mode enabled. Also the user can scan 'Enter Setup' - 'Enable 2.4G' - 'Exit & Save' to enable 2.4G wireless transmission function.

Plug the 2.4G adapter into USB interface of PC, you can try to scan the barcodes to confirm the 2.4G wireless adapter is ready.

Notes: Please do NOT connect scanner with USB data cable when use 2.4G wireless transmission, OR data will be transferred through USB.
Function set up as below



Enable 2.4G wireless mode

6.2 2.4G Paring

CT80 barcode scanner attached a 2.4G adapter when leaving factory, and it was paired with CT80, you can use directly.

If you forget pair with adapter or not, you can plug the 2.4G adapter into PC. Then scan "Enter Setup"- "Scan & Pair" . As soon as you hear high-mid-low high tone beep, it means paired successfully. If you hear a long beep, it means paired failing.

Note: be cautious of using 2.4G pairing function

CT80 can't support multiple scanners pairing with one adapter to upload data at the same time.

Function set up as below



Scan & Pair

7 BLE Wireless Transmission

CT80 only supports Bluetooth 4.0 BLE keyboard transmission mode, mainly apply to Android phone, tablet, win10 system + Bluetooth 4.0 adapter data transmission.

7.1 Enable BLE

CT80 supports BLE wireless data transmission. Bluetooth is default off. Also can scan "Enter Setup" - "Enable BLE" - "Exit & Save" to enable BLE wireless transmission function.

Notes: Please do not connect scanner with USB data cable when use BLE wireless transmission, OR data will be transfer through USB.

Function setup as below:



Enable BLE

7.2 BLE Connection

Take an Android phone as an example:

1. Please refer to "Enable BLE" guide to enable BLE function;
2. Turn on BLE of cell phone and search
3. Find "CT1602XXXXXX" keyboard device in search list of phone;

Note: The last 6 bits are the serial numbers of each device.



Click on the device connection, the phone will automatically pair and connect, shown as following;



When "connected" appears, BLE keyboard has been connected successfully. You can scan and upload bar codes to any editable pages. Shown as following:



Note: We recommend you use the system default Android keyboard input method, to avoid special characters missing.

8 Inventory Mode

If you want save the barcodes in the buffer memory to upload in batches, you can use inventory function. The scanner can auto count barcodes quantity, can control the uploading time and position. You can also remove the barcodes in the buffer memory after upload. The specific setup methods as below:

8.1 Inventory Function

Scan "inventory mode" barcode, entering inventory function.



Inventory mode

8.2 Normal Mode

Scan "Normal Mode" barcode, entering normal mode.



Normal Mode

8.3 Clear Data

Scan "Clear" barcode, removing buffer memo (only apply to inventory mode)



Clear

8.4 Data Upload

Scan "Data Upload" barcode, can upload barcodes in buffer memo (only apply to inventory mode)



Data Upload

8.5 Upload statistics

Scan "Upload Statistics" barcode, can count barcodes quantity (only apply to inventory mode)



Upload Statistics

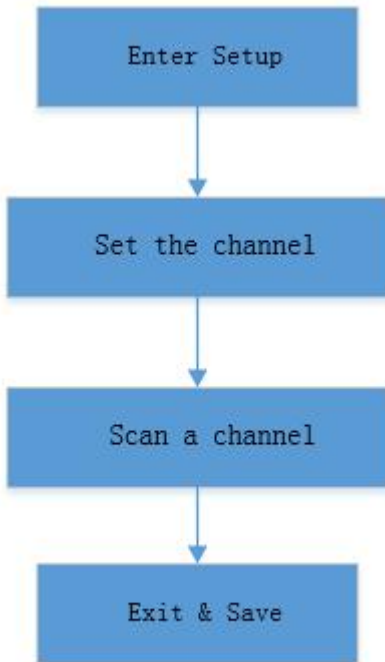
9 Power off Under Low Battery

CT80 with battery monitoring function, it will remind you the battery too low with red indicator flashing. You need connect the USB cable for charging. If you keep to use the scanner, it will power off automatically with two low-tone beeps.

If the battery too low, you will hear two low-tone beeps when power on, and it will power off directly.

10 Switch the 2.4G communication channel

1. In the indoor complex wireless environment, 2.4G adapter may be subject to wireless WIFI frequency interference, and its scan distance will be short, the transmission of data will be unstable. So the product can achieve wireless transmission by switching the 2.4G channel. The operation processes are as below:



Enter Setup



Set the Channel

Select the channel bar code in sequence, select and scan one channel barcode from 10 barcodes, (0,1,2,3,4,5,6,7,8,9), then choose Exit & Save. Re-plug the 2.4G adapter once, and restart the barcode scanner. Then use it.



0



1



2



3



4



5



6



7



8



9



Exit & Save

Disclaimer

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Warning

1.Please remove the power and USB cable under thunderstorm weather conditions,to avoid damage from thunder and lightning.

2.Keep away head sources,please ensure sufficient air circulation.

3.Pay attention that the PDA is waterproof during storage,transportation and running.

4.Please use DC5V 500mA power adapter.