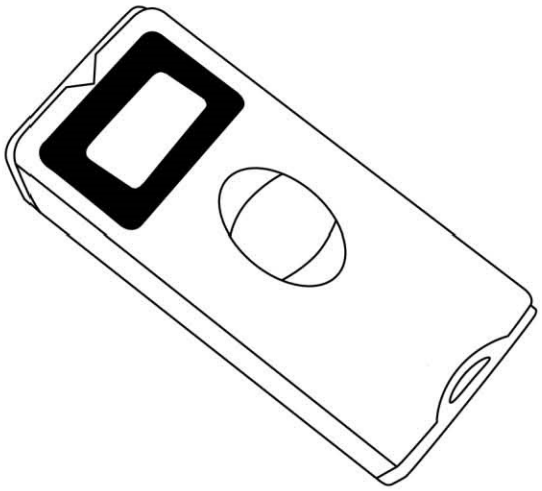
Wireless Pocket Scanner

User's Manual (V1.06)

FCC ID: WOIMB300I



The Federal Communication Commission Statement

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures: -

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced Radio/TV technician for help.**

Use only shielded cables to connect I/O devices to this equipment. You are cautioned that change or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

1 This device may not cause harmful interference and
2 This device must accept any interference received, including interference that may cause undesired operation.

The antenna used for this transmitter must not be collocated or operation in conjunction with any other antenna or transmitter.

Notice : The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

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Note: Due to product improvement programs, specifications and features are subject to change without prior notice.

August 2015

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FCC Approval

This device has been tested in accordance with the procedures and in compliance with Part 15 Subpart B of FCC Rules and keeps all requirements according ANSI C63.4 & FCC Part 15 B Regulation and CISPR22 Class B.

CE Standards

The CE mark as shown here indicates this product had been tested in accordance with the procedures given in European Council Directive 2004/108/EC and confirmed to comply with the Europe Standard EN55022:2006:Class B, EN 55024: 1998 + A1: 2001 + A2: 2003,IEC61000-3-2:2006,IEC61000-3-3:1995+A1:2005,IEC61000-4-2:2001,IEC61000-4-:2006,IEC61000-4-4:2004,IEC61000-4-5: 2006,IEC61000-4-6:2001,IEC61000-4-8:2001,IEC61000-4-11:2004.

LEGISLATION AND WEEE SYMBOL

This marking shown on the product or its literature, indicates that it should not be disposed with other households wastes at the end of its working life. To prevent possible harm to the environment or human healthy from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable re- use of material resources.

Household users should contact either the retailer where they purchased this product or their local government office for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their sup- plier and check the terms and conditions of the purchase.

Chapter 1. Introduction

This barcode scanner is a brand new compact design which is especially for the applications in ticketing, stocktaking or logistic market. With its tiny and lightweight body, it can be easily carried in pocket or bag for mobility application. As the tiny compact body, the housing is designed with IP54 rating that prevents from water and dust and 1.5M dropping resistance. In addition, it can easily connect to the most mobile devices via Bluetooth technology on android and iOS system. The scanned data can be immediately transferred to the corresponding application programs or stored in the built-in memory.

The scanner has built-in a large memory size of 8M bytes for user data storage that can save over 100,000 items of 50 bytes barcode data. The scanner absolutely provides plenty of memory requirements.

With its auto-shuttle-emulation-like smart detection that offers superior decoding on a reading speed up to 500 scans per second and up to 250mm reading depth for the majority of 1D barcodes, the scanner delivers excellent decoding performance.

The scanner is absolutely a high performance compact barcode scanner that provides the most cost-effective solutions in the market. It is perfectly suitable and definitely the best choice for the application with mobile devices.

1.1 Safety & Caution

Please read the following safety statements carefully.

1. Please preserve this user's manual for reference.
2. Before cleaning the equipment, the power must be cut off. Do not use liquid or spray type of detersive to clean the equipment. Please use dampish cotton cloth to clean the equipment.
3. Keep the equipment dry to avoid short circuit.
4. During installation the equipment must be fixed at solid table to avoid damage caused by falling.
5. Before inserting power please ensure the voltage is healthy to the equipment.
6. For safety please tie wire well and don't put anything on the wire.
7. If equipment is not been used for long time, please cut off the power to avoid damage from surge power.
8. Don't spray any liquid on this scanner as it may cause fire or short circuit.
9. Please do not open the equipment. For safety only qualified serviceman can open the equipment.
10. If there are the following situations please contact the qualified serviceman to check this equipment.
    (a) The damage of wire.
    (b) Liquid infiltrates into the equipment.
    (c) The equipment has been exposed to wet environment.
    (d) The equipment can't work well.
    (e) The equipment has any obvious damage that makes it working abnormally.
11. Do not store the equipment at the temperature lower than -20°C (-4°F) or higher than +70°C (158°F) to avoid any damage.

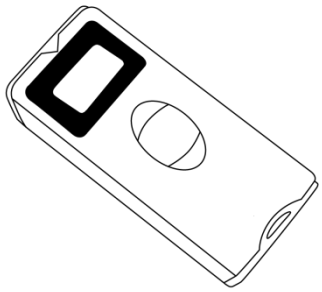
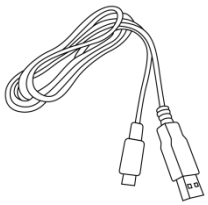
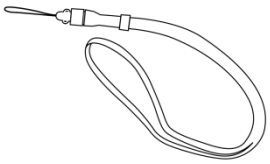
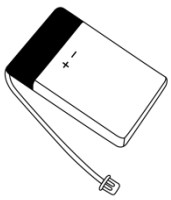
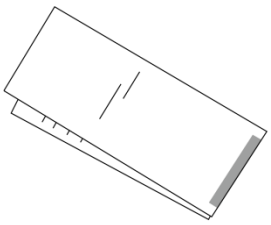
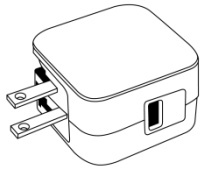
1.2 Package

Unpack the scanner as follows:

Take the scanner and accessories out of the box. Remove the packing materials. Check the packing list to make sure all the items ordered are received.

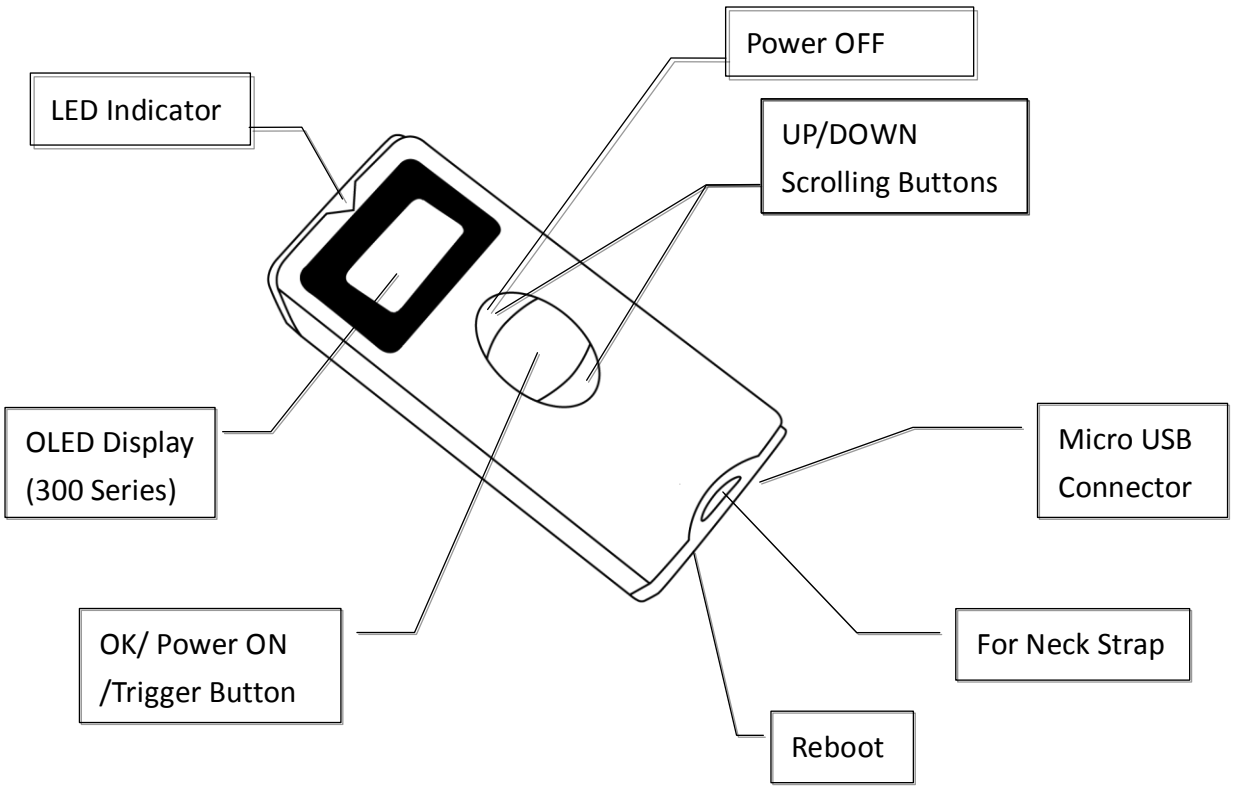
- ✓ Barcode Scanner
- ✓ USB Cable
- ✓ Neck Strap
- ✓ Battery
- ✓ Quick Guide
- ✓ Adaptor (Option)

Visually inspect the scanner and accessories for any evidence of physical damage.
If anything is missing or appears to be damaged, immediately contact your dealer.

		
Barcode Scanner	USB Cable	Neck Strap
		
Battery	Quick Guide	Adaptor (Option)

1.3 Scanner Characteristics

The scanner comes with 3 controls buttons and 1 indication LED. The exterior control and display are shown below.



*300 series are including the OLED display but 200 series are not.

Chapter 2. Operating the Scanner

2.1 Getting Started

The barcode scanner provides the easy-use control buttons and easy-read signal for user scanning experience. The following will give a guide to start with this scanner.

2.1.1 Attach Neck Strap

It is recommended to attach the neck strap to the barcode scanner and wearing it on either neck or hand for a convenient and safety carry.

2.1.2 Charge Battery

The barcode scanner is installed with a high capacity Lithium battery. When the LED shows flashing red, it indicates low battery and the capacity is less than 30%. It needs to be charged.

The barcode scanner can be charged by either PC USB port or adaptor. To charge the scanner, connect the USB port between PC USB port or adaptor. When the battery is fully charged, the LED illuminates green. Remove the USB cable from PC USB or adaptor.

2.2 Power up Scanner

To power up the scanner, press “UP” button. The scanner is ready for scanning barcodes.

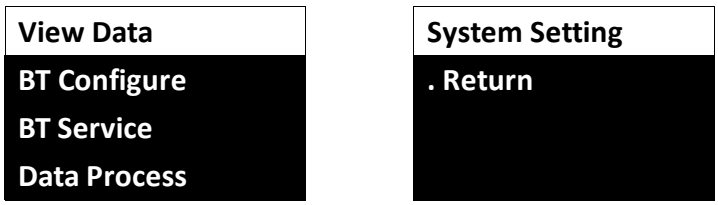
2.3 Reading Barcodes

The scanner supports all major 1D barcodes. To read the barcodes, press the

TRIGGER/OK key and point the red beam fully across the barcodes. The following are examples.

2.4 Enter Scanner Menu

The scanner can be configured by scrolling control buttons. Press the UP and DOWN buttons or Down button 3~5 sec simultaneously to access the scanner configuration menu.



The menu and functions are listed as the below table. **(200/300 series)**

Top Menu	Sub Menu	Option	200	300
View Data	View/Delete	1.View: press UP & DOWN scroll button 2.Delete: press TRIGGER/OK for 3 sec press UP to delete data press DOWN to exit		◎
BT Configure	Connect Device	SPP/**HID** [iOS, HID only] In SPP mode, install the APP on Mobile or Tablet is required.	◎	◎

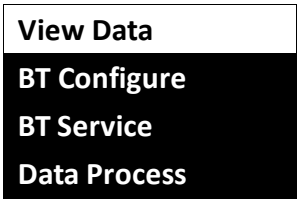
	Auto Connect(HID)	Enable/**Disable**	◎	◎
	MAC Address	12 Characters *Bluetooth* MAC Address	◎	◎
	BT Version	Bluetooth Firmware Version	◎	◎
	Wake up Nulls	Enable/**Disable**	◎	◎
BT Service	Power ON/OFF	Enable/**Disable**	◎	◎
	Pairing	Pairing neighboring Bluetooth devices	◎	◎
	Connect to Last Dev	View Connect to Bluetooth device	◎	◎
Data Process	Store Mode	Send Only / **Send & Store** /Store Only	◎	◎
	Avoid Same Code	Enable/**Disable**	◎	◎
System Setting	Memory Status	Indicates: Scanned/Deleted/Available barcode numbers	◎	◎
	Reset Memory	Reset the memory counters	◎	◎
	Auto Erase	Enable/**Disable**	◎	◎

	Sleep Timeout	**Disable**, 1 sec to 5 minutes(**3 minutes**)	◎	◎
	Set Date/Time	YYYY:MM:DD & HH:MM:SS	◎	◎
	Battery Status	Level of the Battery Status Indicator		◎
	Scanner FW Ver.	Firmware Version	◎	◎
	Beep	**Enable**/Disable	◎	◎
	Vibration	Enable/**Disable**	◎	◎
	Auto Exit	**Enable**/Disable		◎
	Data Format	Time & Battery & Code /Memory & Code/ **Code Only**		◎
	Menu Scrolling	**Enable**/Disable		◎
	Brightness	1 to 15 level (**8 levels**)		◎
	Factory Default	UP-default Restore Default Settings OK-cancel	◎	◎
	Scan Review	**Enable**/Disable	◎	◎

***The options in bold are default values. *200 series, its function is done by scanning the barcode set.**

2.4.1 View Data Menu

The scanned barcodes can be reviewed by selecting View Data. On the top menu, press UP or DOWN to select “View Data”.



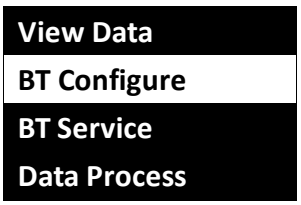
Press UP or DOWN to review the scanned barcodes.

To delete this item, press OK for 3 seconds. The further messages show up.

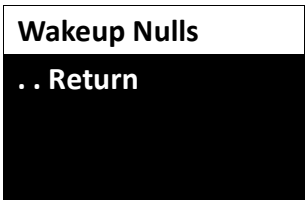
Press UP to confirm deletion. Press DOWN to return to data review.

2.4.2 BT Configuration

On the top menu, press UP or DOWN to select “BT Configure” for Bluetooth setting.

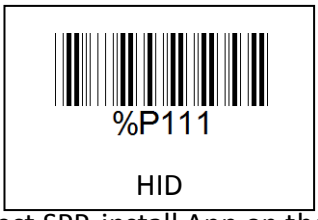


The “BT Configure” sub-menu is as following.



2.4.2.1 Connect Profile

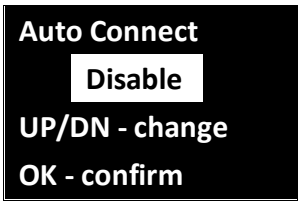
Select “Connect Profile” to set BT connection as HID or SPP.

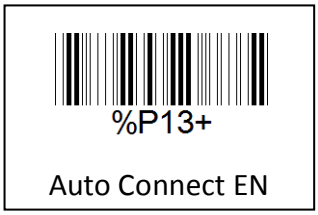


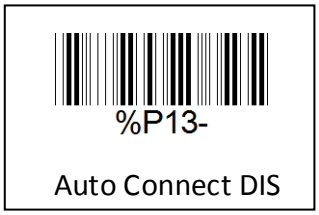
For iOS, select HID only. If select SPP, install App on the mobile phone or tablet is required.

2.4.2.2 Auto Connect

Select “Auto Connect” to decide if the BT can automatically connect upon available.



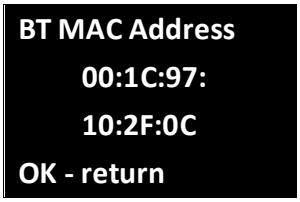




Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.2.3 MAC Address

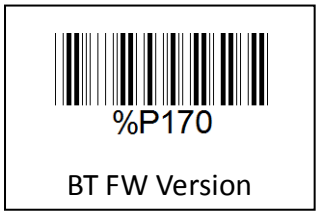
Select “MAC Address” to show the MAC address on this scanner.



Press OK to return to the upper menu.

2.4.2.4 BT Version

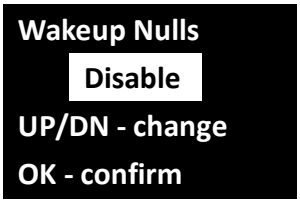
Select “BT Version” to check the BT firmware version.

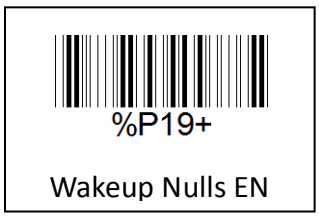


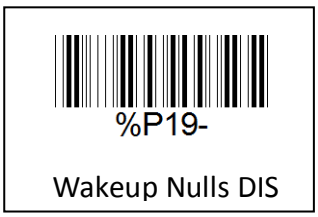
Press any keys to return to the upper menu.

2.4.2.5 Wakeup Nulls

Select “Wakeup Nulls” to select if send ‘Null’ to the host when scanner wakes up.



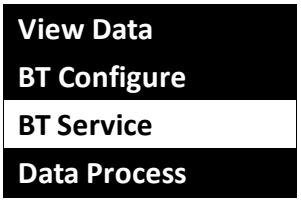




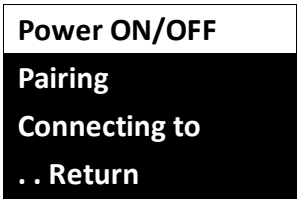
Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.3 BT Service

On the top menu, select “BT Service” to enter Bluetooth connection setting.

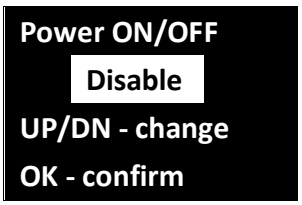


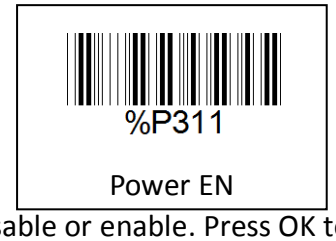
The “BT Service” sub-menu is as following.

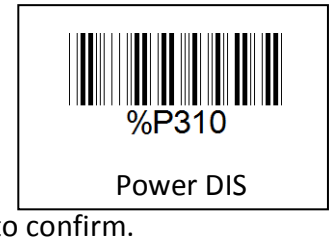


2.4.3.1 Power ON/OFF

Select “Power ON/OFF” to set Bluetooth connection on or off.







Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.3.2 Pairing

Select “Pairing” to connect the scanner to mobile phone or tablet.

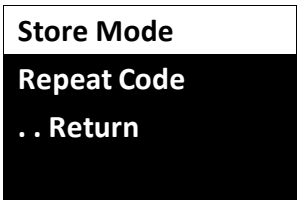
2.4.3.3 Connect Last Dev

Select “Connecting to” to pair the last connected device.

2.4.4 Data Process Menu

On the top menu, select “Data Process” for advanced data configuration.

The sub-menu is as following.



2.4.4.1 Store Mode

On the “Data Process” sub-menu, select “Store Mode” for following options.

- **Send & Store**: Send the scanned barcodes to host and store the barcodes in scanner memory simultaneously.
- **Store Only**: Only store the scanned barcode in scanner memory without sending to host.
- **Send Only**: Only send the scanned barcodes to host without storing in scanner memory.

Press UP or DOWN to set the options. Press OK to confirm.

2.4.4.2 Avoid Same Code

Select “Avoid Same Code” to set if 2 continuous barcode scanning is not allowed reading identical barcode. In other words, this is to set if the scanner cannot read the same barcode twice continuously.

Avoid Same Code Disable UP/DN - change OK - confirm	%P53+ AvoidSameCode EN	%P53- AvoidSameCode

Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.5 System Setting

On the top menu, select “System Setting” for other system settings.

System Setting
. Return

The settings in “System Setting” are listed below.

Memory Status
Reset Memory
Auto Erase
Sleep Timeout

Page 1

Set Date/Time
Battery Status
Scanner FW Ver
Beep

Page 2

Vibration
Auto Exit
Data Format
Menu Scrolling

Page 3

Brightness
Factory Default
Scan Review
. . Return

Page 4

2.4.5.1 Memory Status

On the sub-menu, select “Memory Status” to check the memory usage which indicates the item numbers of scanned barcodes by memory counters.

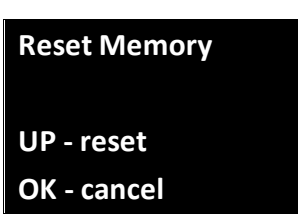
Memory Status Scanned:000147 Deleted:000001 Avaible:099853	%P710 Memory Status

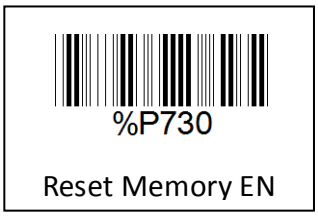
In this case, 147 barcodes are stored. 1 barcode is deleted. 99853 items

are available. Press OK to return to upper menu.

2.4.5.2 Reset Memory

On the sub-menu, select “Reset Memory” to reset the memory counters.

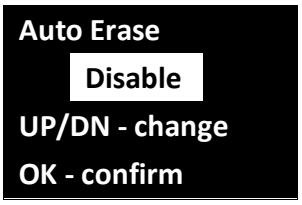


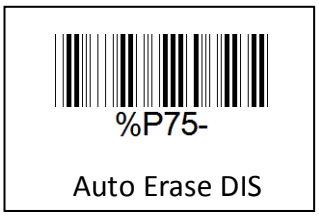


Press UP to reset the counters.

2.4.5.3 Auto Erase

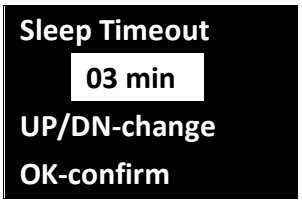
On the sub-menu, select “Auto Erase” to erase all the saved items in memory automatically when the items reach 100,000. A message will prompt before erasing.

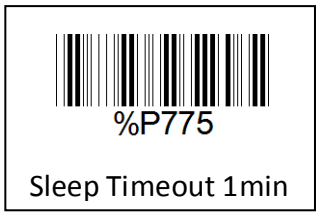




2.4.5.4 Sleep Timeout

On the sub-menu, select “Sleep Timeout” to set the time to enter sleep mode. The time can be set from 1 second to 5 minutes.

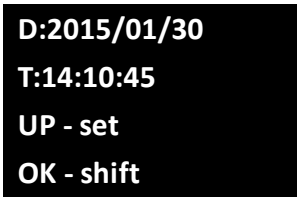




Press UP or DOWN to set the time. Press OK to confirm.

2.4.5.5 Date/Time Set

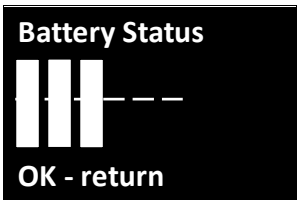
On the sub-menu, select “Date/Time” to set the current date and time.



Press OK to shift the position. Press UP or DOWN to increase or decrease the date or time.

2.4.5.6 Battery Status

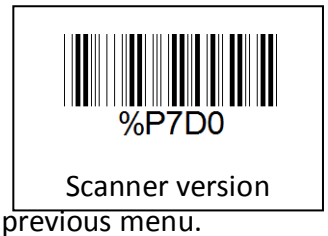
On the sub-menu, select “Battery Status” to check the battery capacity.



Press OK to return previous menu.

2.4.5.7 Scanner Version

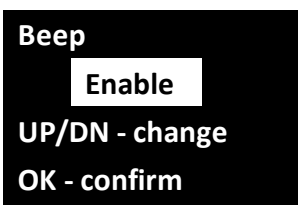
On the sub-menu, select “Scanner Version” to check the firmware version.

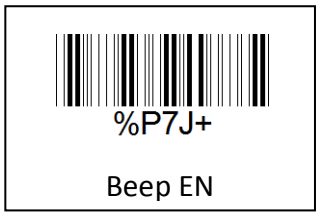


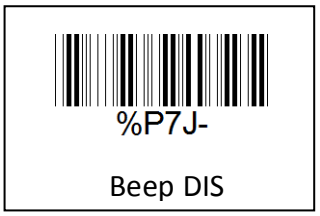
Press OK to return to the previous menu.

2.4.5.8 Beep

On the sub-menu, select “Beep” to set if beeping when scanning barcodes.



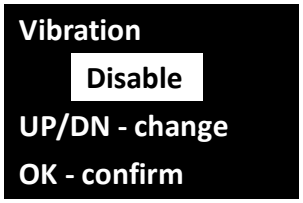


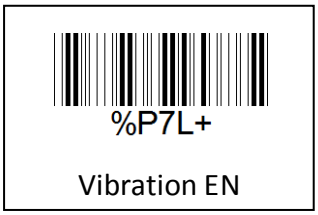


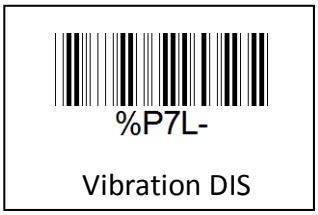
Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.5.9 Vibration

On the sub-menu, select “Vibration” to set if vibrating when scanning barcodes.



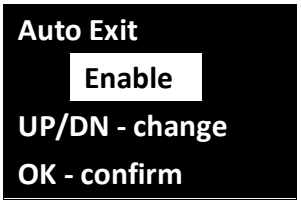




Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.5.10 Auto Exit

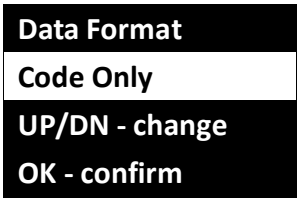
On the sub-menu, select “Auto Exit” to set auto exit the screen menu.



Press UP or DOWN to set disable or enable. Press OK to confirm.

2.4.5.11 Data Format

On the sub-menu, select “Data Format” to set the information shown on scanner LCD when data review.



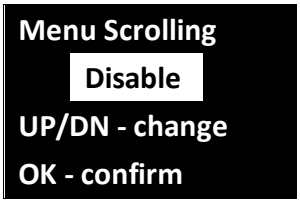
Press UP or DOWN to select the information as following options.

- Time & Battery & Code
- Memory & Code
- Code Only

Press OK to confirm.

2.4.5.12 Menu Scrolling

On the sub-menu, select “Menu Scrolling” to set whether the scanner menu is scrolling when pressing UP/DOWN and reaching the last item.



Press UP or DOWN to set disable or enable. Press OK to confirm.

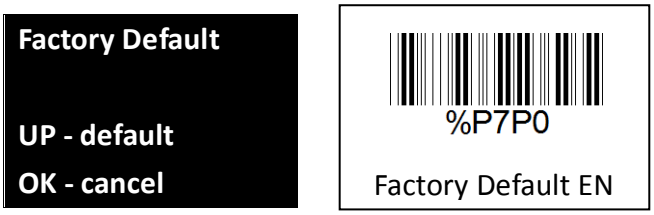
2.4.5.13 Brightness

On the sub-menu, select “Brightness” to set the LCD brightness.

The brightness is ranged from level 1 to level 15. Press UP or DOWN to set the level. Press OK to confirm.

2.4.5.13.1 Factory Default

On the sub-menu, select “Factory Default” to restore all to factory default settings.

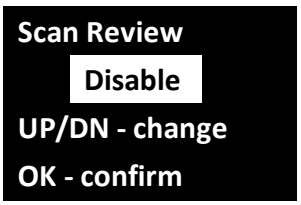


Press UP to restore the default settings. Press OK to return to the previous menu.

2.4.5.13.2 Scan Review

On the sub-menu, select “Scan Review” to set the data to show on the display after scanning. It will be able to review the scanned data right

after scanning.



Press UP or DOWN to set disable or enable. Press OK to confirm.

2.5 LED Status

The LED on scanner shows different color to indicate charging and scanning status. Refer to the table below for LED status.

Status	**LED Color**
[Scanning]Decoding success	Green Flashing
[Scanning]Battery capacity < 30%	Red Flashing
[Charging]Battery in charging	Red
[Charging]Battery in charging when BT connected	Blue & Keep Red Flashing
[Charging]Battery capacity = 100%	Keep Green Flashing
[Charging]Battery capacity = 100% when BT connected	Blue & Keep Green Flashing
[Connecting]BT connected or connecting successful	Blue
[Checking] BT version or MAC address as BT disconnected	Yellow
[Reboot]	White

Green Flashing, indicates the barcode is decoded successfully
Red Flashing, indicates the battery capacity is less than 30%
Red LED or Keep Red Flashing LED, indicates the battery is in charging
Keeps Green Flashing LED, indicates the battery is fully charged.
Blue LED, indicates the BT connection is successful or connected
Yellow LED, indicates checking the BT information as BT disconnected.
White LED, indicates when system is reboot

Chapter 3. Connect Mobile Devices

The barcode scanner can be connected to mobile devices, such as smart phones or tablets for further configuration and data operation. The corresponding App should be installed on the mobile devices.

3.1 Device Requirements

The mobile devices requirements are as following:

- Android 4.0 or above
- Bluetooth 2.1

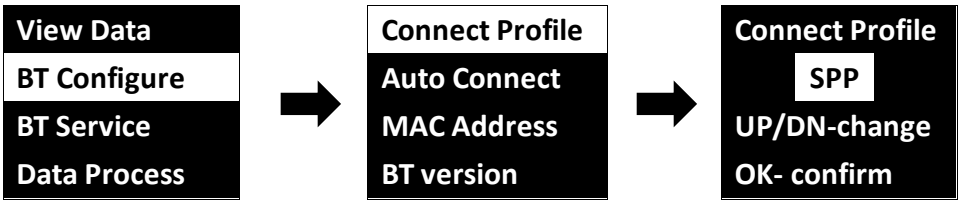
3.2 Download App

Use the mobile device and open browser to visit Google Play. In the input box, type “OEM Pocket Scanner” to search the app. Click “INSTALL” to install it on the mobile device. This version of app is for Android mobile devices.

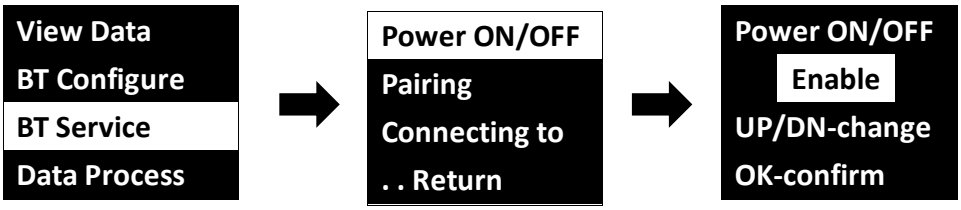
3.3 Configure Scanner

Prior to connecting scanner to the mobile devices, the settings on the scanner should be configured. On the scanner, press UP and DOWN buttons simultaneously to enter configuration menu.

Select BT Configure -> Connect Profile -> SPP.



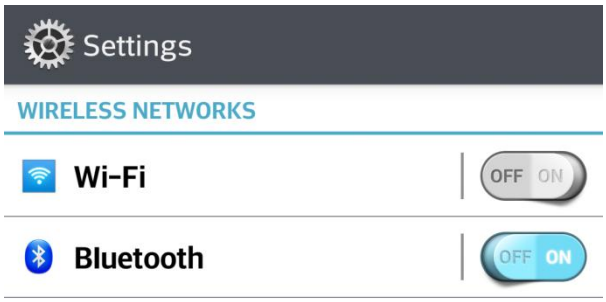
Select BT Service -> Power ON/OFF -> Enable.



3.4 Pairing

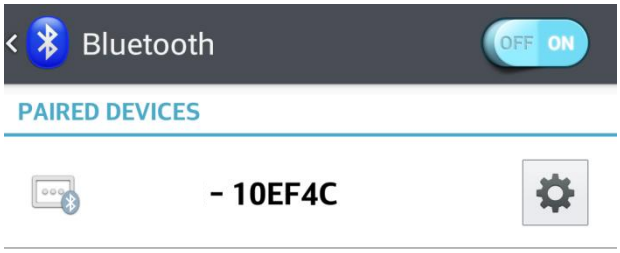
The following steps show the pairing steps for the scanner and mobile device.

a. Turn on Bluetooth power on mobile device.



b. Discover the searching devices shown on mobile device. Find “Pocket Scanner” and click “Pair” to connect the scanner with mobile device by Bluetooth.

c. When paired, the scanner will be shown as paired device on mobile device.

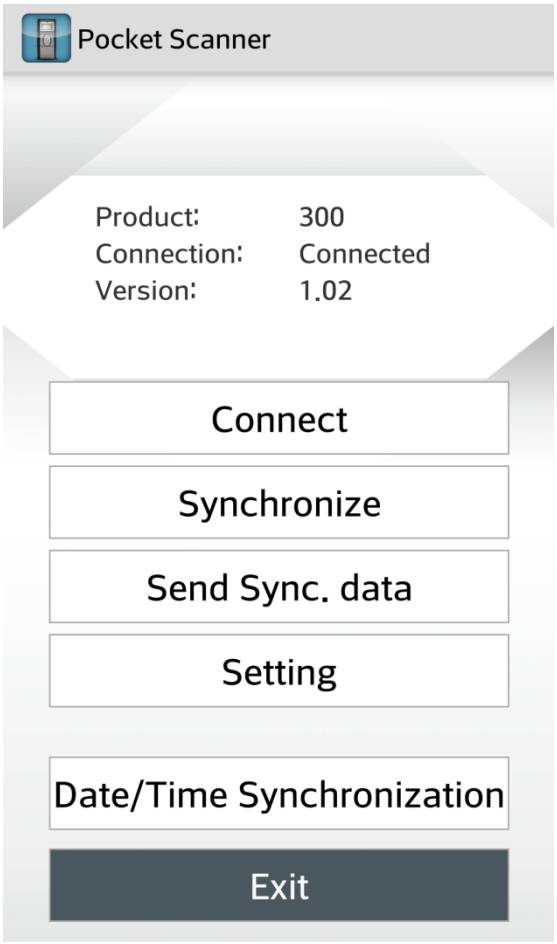


3.5 App Main Screen

In the App list, click “Pocket Scanner” to execute the scanner application program.

Down from Google Play
Search “oem pocket scanner”

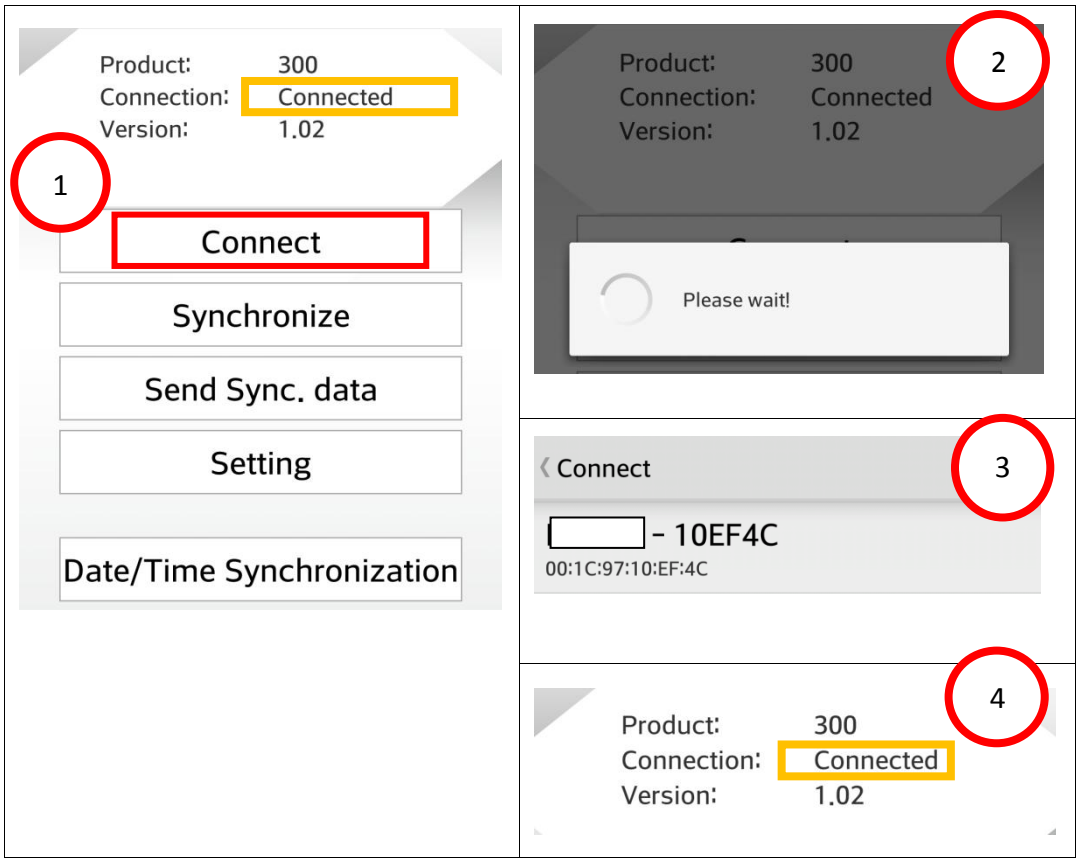
The main screen looks like this.



- On the screen top shows the product name, connection status and app version.
- Connect Button: Connect app to the scanner.
- Synchronize: Upload the data from scanner to mobile device.
- Send Sync. data: Send out the uploaded data to the designated email address.
- Setting: Configure the data format for the uploaded barcodes.
- Date/Time Synchronize: Set the date and time on scanner according to mobile device.
- Exit: Close this app program.

3.6 Connect Scanner

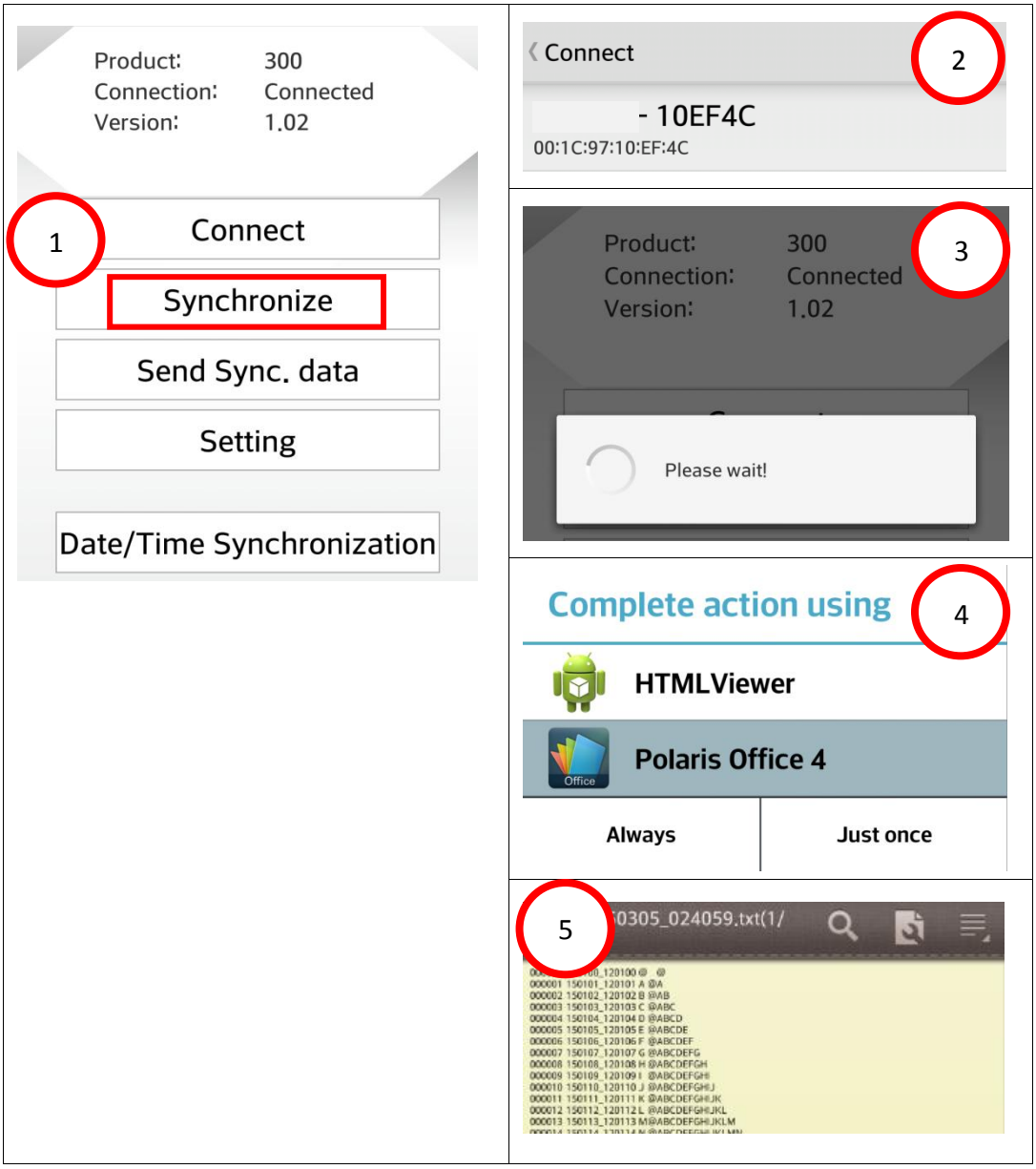
To connect the app with mobile device, follow the steps below.



1. Press “Connect”
2. Wait for a while
3. When connected, the scanner is shown on the device list
4. On the screen top, the connection status shows “Connected”.

3.7 Synchronize the Data From Scanner

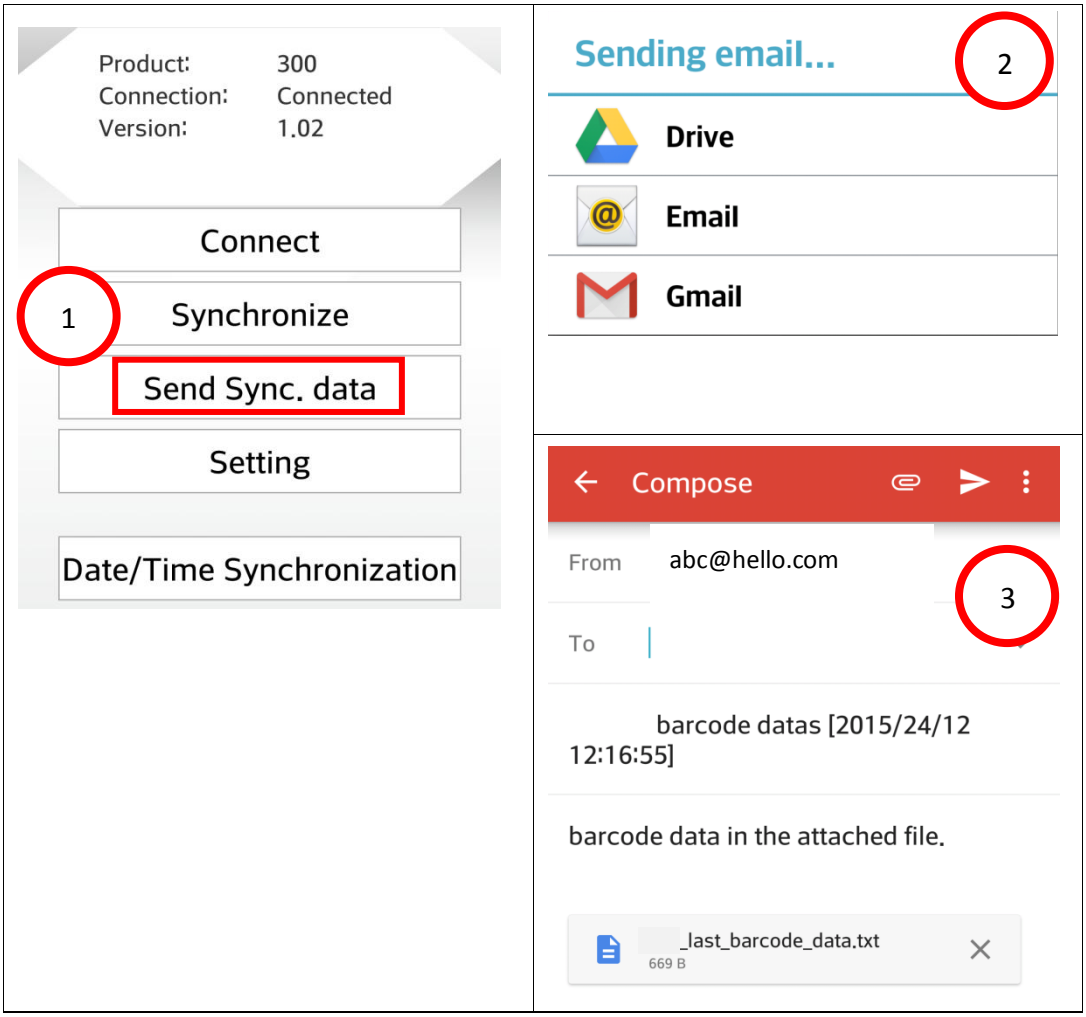
The scanned data can be saved in the barcode scanner and the data can be uploaded to the mobile devices. Follow the steps below.



1. Press “Synchronize” to upload all the data from scanner to mobile device.
2. Select the corresponding scanner.
3. Wait for a while when data is transferring.
4. Select a program to display the data.
5. All the scanned data is shown in the program.

3.8 Send the Synchronized Data

Save the uploaded data from scanner as a file in the mobile devices. This file can be sent out to the designated email address. Therefore the data can be downloaded from PC or other equipment in order to do further data process on other PC's or equipment. Follow the steps below.

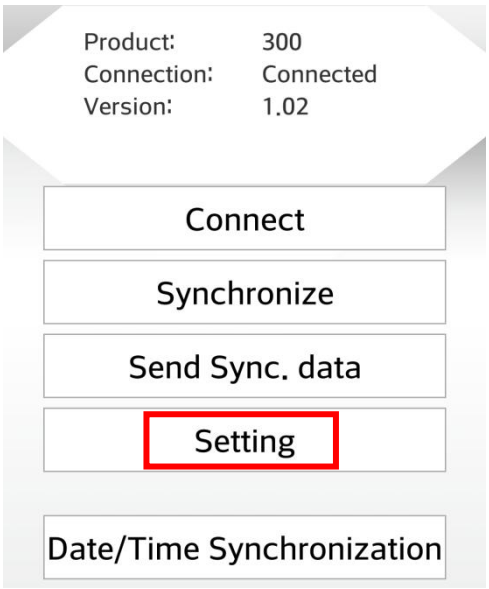


1. Press "Send Sync. data" to send out the data file.
2. The mobile devices will pop up email options. Depending on the mobile devices and email address availability, select appropriate option.
3. Input the email address. The data file can be sent to this address.

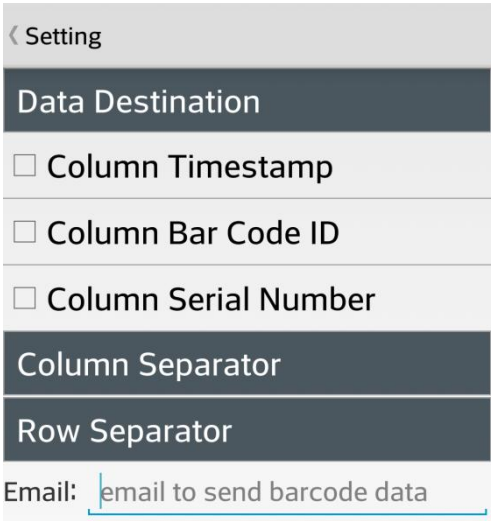
3.9 Data Format Setting

The data shown in mobile devices can be formatted prior to upload the data from scanner. Therefore required data format can be used in the mobile devices.

On the main screen, press “Setting” to enter the menu.



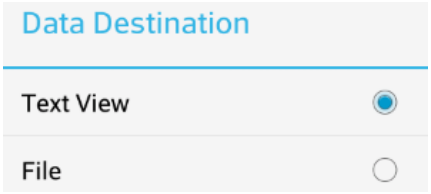
The options in “Setting” are shown as following.



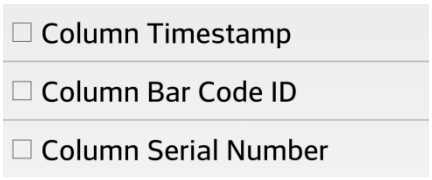
The data format to be configured is defined as following. For example: 000001,2015-06-20_14:10:15, A,12345678CR

Data	000001	,	2015-06-20_ 14:10:15	,	A	,	12345678	CR
Format	Serial No	Column separator: NONE TAB SPACE COMMA SEMICOLON	Time stamp	Column separator: NONE TAB SPACE COMMA SEMICOLON	Barcode ID	Column separator: NONE TAB SPACE COMMA SEMICOLON	Barcode	Row separator: NONE LF CR CRLF

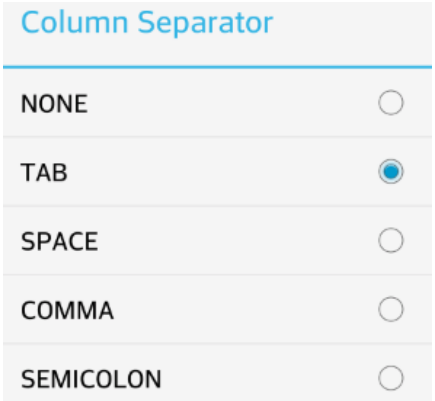
- Data Destination: The data uploaded from scanner can be assigned to be viewed by data process program or saved as a file.



- Column: Tick to add time stamp, barcode ID or barcode sequence number in front of each barcode.



- Column Separator: Select one of the separators between columns.

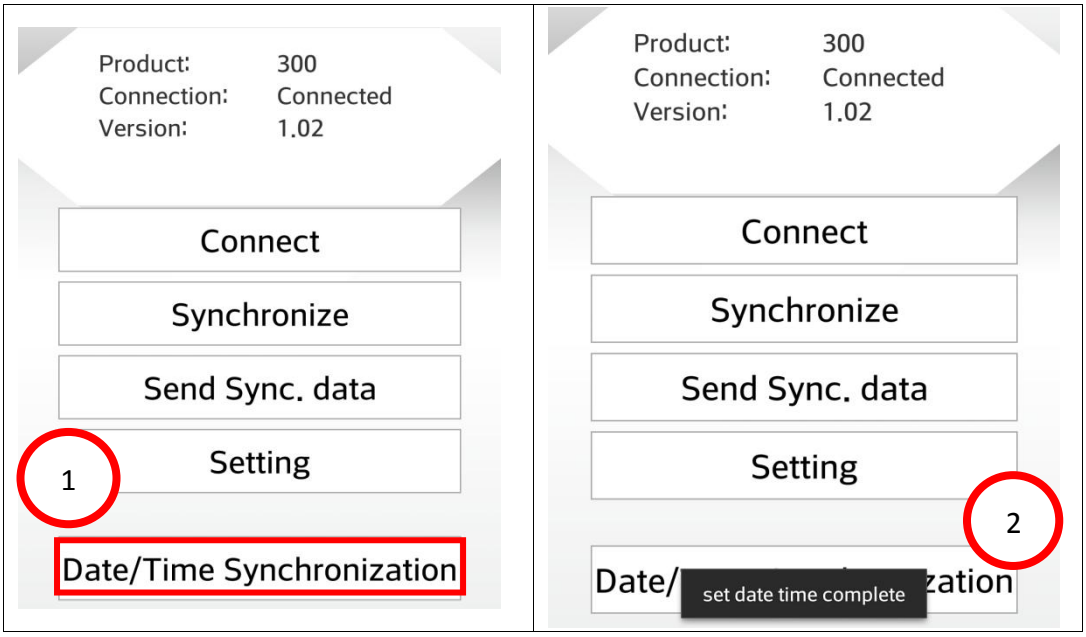


- Row Separator: Select one the separators between 2 rows.

- Email: Set the email address here for the data file to be sent to. When press “Send Sync. data” to send out the file, the email address will be automatically prompted. No need to type it afterwards.

3.10 Synchronize the Date and Time

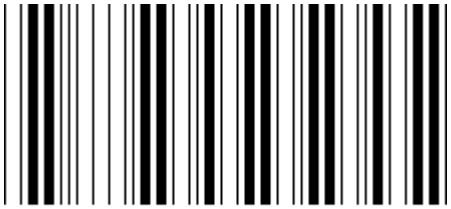
The data and time on the scanner can be set by “Date/Time Synchronization”, according to the mobile devices. Follow the steps below.



1. Press “Date/Time Synchronization”. The date and time in the scanner will be set according to the mobile devices.
2. When success, the message shows “Set date time complete”.

Appendix 1 -Configuration Flow Chart(Pocket Scanner)

①Scan Start of Configuration

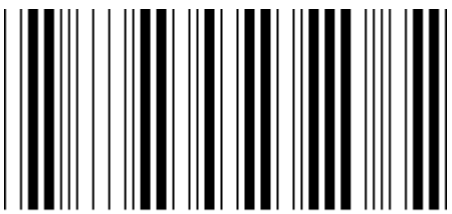


%PB11

②Scan all necessary labels for parameters that meet applications

Interface Selection
Connection Selection
Symbologies Selection

③Scan End & Save Parameter to permanently save the settings by your programmed.



%PB13

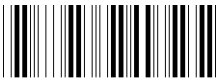
Appendix 2 - Setting Barcode (1)

HID %P111	SPP %P112
Auto Connect(HID) Enable %P13+	Auto Connect(HID) Disable %P13-
BT MAC Address %P150	BT Versioin %P170
Wakeup Nulls Enable %P19+	Wakeup Nulls Disable %P19-
BT Power ON %P311	BT Power OFF %P310
BT Pairing %P330	BT Connect Last Device %P350
[Store Mode]Send & Store %P511	[Store Mode]Store Only %P512

Appendix 3 - Setting Barcode(2)

[Store Mode]Send Only %P513	Reset Memory %P730
Avoid Same Code Enable %P53+	Avoid Same Code Disable %P53-
Auto Erase Enable %P75+	Auto Erase Disable %P75-
Memory Status %P710	Sleep Timeout 1 sec %P771
Sleep Timeout 5 sec %P772	Sleep Timeout 10 sec %P773
Sleep Timeout 30 sec %P774	Sleep Timeout 1 min %P775
Sleep Timeout 2 min %P776	Sleep Timeout 3 min %P777

Appendix 4 - Setting Barcode(3)

Sleep Timeout 5 min %P778	Scanner Version %P7D0
Engine Version %P7F0	BT Versioin %P7H0
Beep ON %P7J+	Beep OFF  %P7J-
Vibration ON %P7L+	Vibration OFF %P7L-
[Data Format] Time&Battery& Code %P7N1	[Data Format]Memory & Code %P7N2
[Data Format]Code Only %P7N3	Factory Default %P7P0
Scan Review ON(300 series) %P7R+	Scan Review OFF(300 series) %P7R-