



For Android™ 7.1

# Mobile POS Terminal PM500 User Manual

# Instruction

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This manual provides information about basic features and using the PM500. Please read this manual carefully before using your handy payment device and peripherals to ensure safe and proper use.



**Note:** Screenshots in this manual may differ from actual screens.

## Revision History

Revision	Date	Description
V01	24 Aug 2020	Initial release
V02	26 Aug 2020	Added 'Printer roller reassembling'
V03	08 Sep 2020	Removed unsupported features and edited typo
V04	13 Oct 2020	Changed cradle images, SKU list, battery specification, RFID description
V05	19 Jul 2021	Added Battery safety information chapter Updated SKU list Removed not supported document
V06	05 Jan 2022	Added SSC/SEC cradle description in Cradle chapter Added trigger off status icon, Smart charging feature description Updated Master App chapter Updated SKU list, barcode aiming figure
V07	27 Mar 2023	Updated Battery Safety Information chapter

## Related Document

- RFID Settings User Guide for PM500 – describes how to use RFID Settings and RFID Demo applications which are pre-installed on PM500 UHF RFID SKU.

# Instruction

## PM500 SKUs

The contents of this manual can cover the following SKUs. SKU configuration can be changed depending on location.

SKU	Part Number	Common	Rear Camera	Scanner	UHF RFID	RAM /Flash	Fiscal	PCI	
SKU1 (EU/KR)	P500GK0038CE0C	LTE, Wi-Fi, IC/MSR, Thermal-Printer, NFC, Bluetooth	O			1/8G		O	
SKU2 (EU/KR)	P500GK0038CE6C		O			1/8G			
SKU3 (EU/KR)	P500GK0039CE0C		O			2/16G		O	
SKU4 (EU/KR)	P500GK0039CE6C		O			2/16G			
SKU5 (N-America)	P500GI0038CE0C		O			1/8G		O	
SKU6 (Japan)	P500GJ0038CE0C		O			1/8G		O	
SKU7 (EU/KR)	P500GK0038CE02		O			1/8G	O	O	
SKU8 (EU/KR)	P500GK0039CE02		O			2/16G	O	O	
SKU9 (EU/KR)	P500GKZ038CE0T				O		1/8G		O
SKU10 (EU/KR)	P500GKZ038CE6T				O		1/8G		
SKU11 (EU/KR)	P500GKZ039CE0T				O		2/16G		O
SKU12 (EU/KR)	P500GKZ039CE6T				O		2/16G		
SKU13 (N-America)	P500GIZ038CE0T				O		1/8G		O
SKU14 (Japan)	P500GJZ038CE0T				O		1/8G		O
SKU15 (EU/KR)	P500GKZ038CE01				O		1/8G	O	O
SKU16 (EU/KR)	P500GKZ039CE01				O		2/16G	O	O

# Instruction

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SKU	Part Number	Common	Rear Camera	Scanner	UHF RFID	RAM /Flash	Fiscal	PCI
SKU17 (EU/KR)	P500GK0038CE03	LTE, Wi-Fi, IC/MSR, Thermal- Printer, NFC, Bluetooth			O	1/8G		O
SKU18 (EU/KR)	P500GK0038CE63				O	1/8G		
SKU19 (EU/KR)	P500GK0039CE03				O	2/16G		O
SKU20 (EU/KR)	P500GK0039CE63				O	2/16G		

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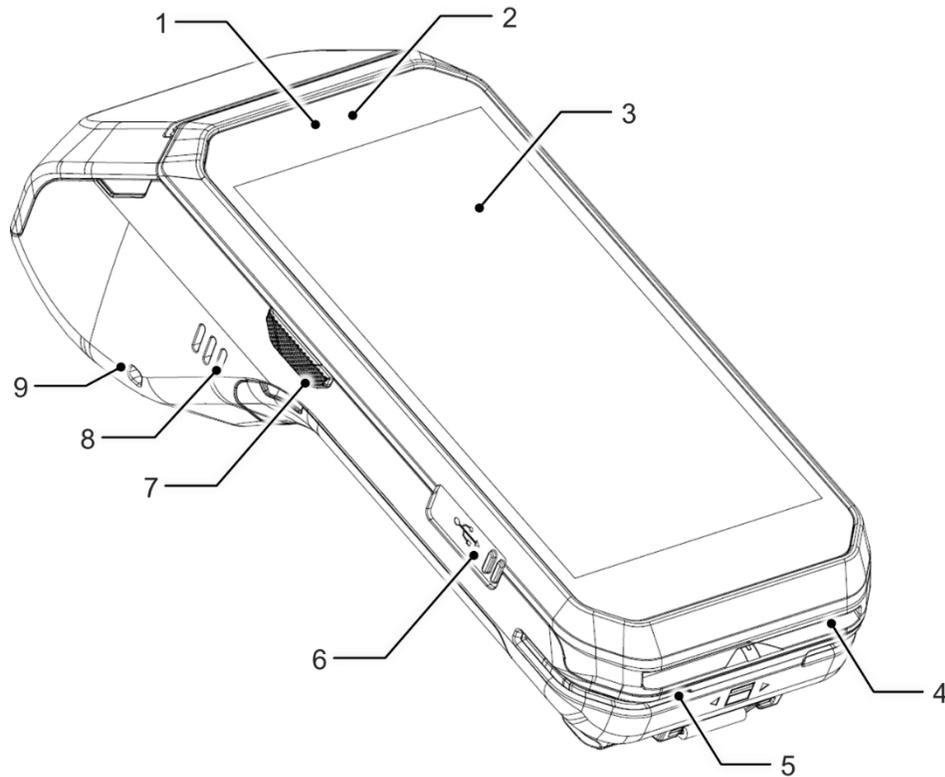
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# Getting Started

## Device Parts

Figure 1 PM500 Front view



No	Name	Description
1	Front LED indicators	Indicate the power status and notification Find more details in <a href="#">LED Indicator</a>
2	Front camera	Take a picture
3	Display	Display all operating screen
4	IC Card Reader (ICCR)	For detail information, refer to <a href="#">IC Card</a>
5	Magnetic Stripe Reader (MSR)	For detail information, refer to <a href="#">Magnetic Stripe Card</a>
6	USB connector	USB 2.0 Type C / OTG
7	Scan trigger (Left)	Scan a barcode by pressing
8	Speaker	Ring buzzer and system sound
9	Stylus pen strap hole (Left)	Attach stylus pen

# Getting Started

Figure 2 PM500 back+right view

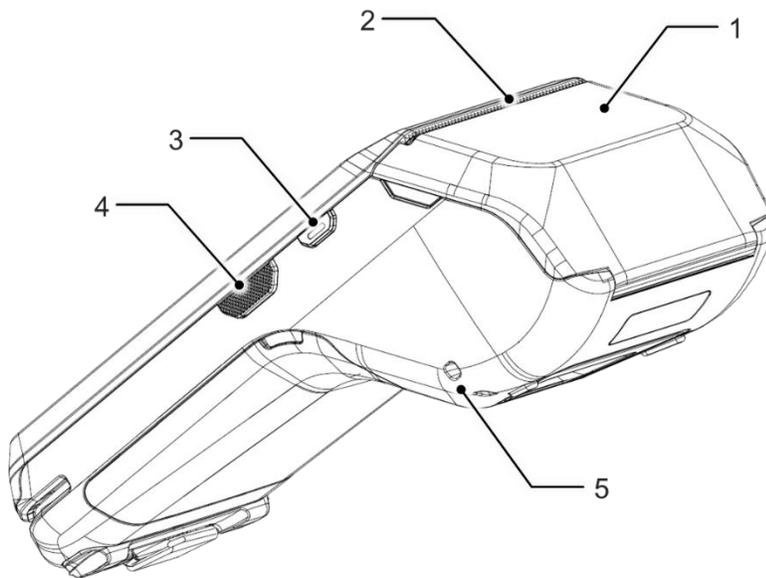
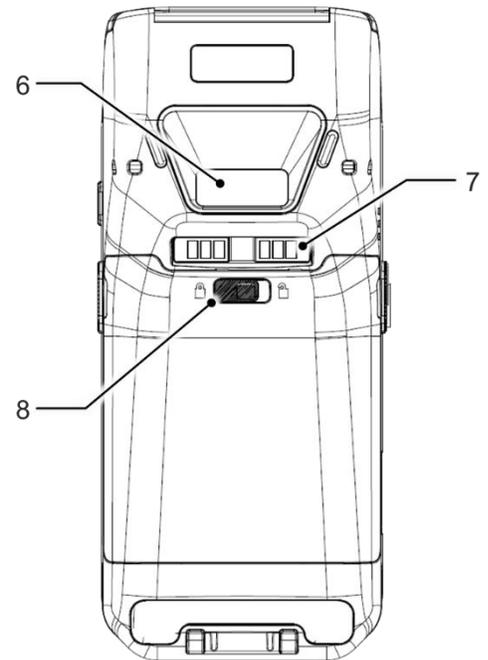


Figure 3 PM500 back view



No	Name	Description
1	NFC Antenna	Communicate with NFC cards/devices Make contactless payment
2	Thermal printer	Print a bill by thermal printer and paper roll
3	Power button	Press to turn on/off the device or the screen
4	Scan button (Right)	Scan a barcode by pressing
5	Stylue pen strap hole (Right)	Attach stylus pen
6	Scanner or Rear Camera	Scan a barcode or take a photo (Different by SKU)
7	I/O(dock) connector	Pogo 6 pin type I/O connector Attach PM500 to cradle
8	Battery cover lock	Move to lock/unlock the battery cover. For more detail, see <a href="#">Install &amp; Remove Battery</a>

# Getting Started

## Product Standard Accessories

The following items are in the product box.

Accessory	Name
	Standard battery pack (3,000mAh)
	AC/DC power supply
	Country plug (UK / US / EU / KR plug)
	USB type C cable
	LCD protection film



**Note:** The images may differ from the actual accessory.

# Getting Started

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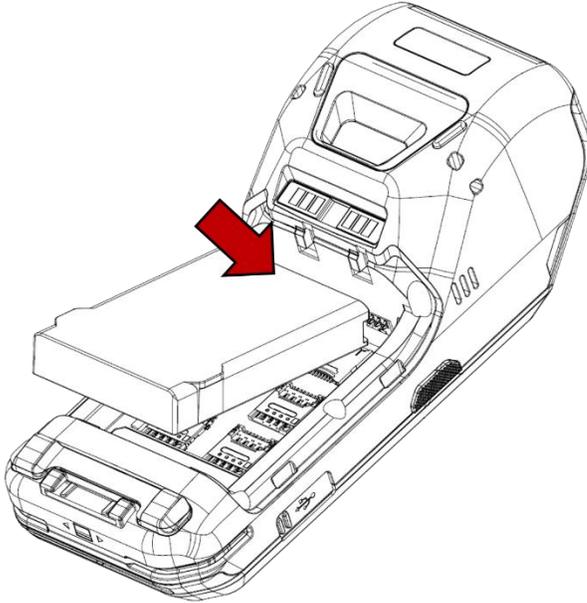
## Setup

### Install & Remove Battery

#### Install the battery

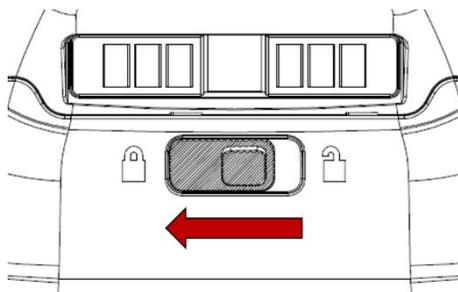
1. Insert the top of the battery first, and then push down the bottom

Figure 4 Installing battery



2. Attach the bottom of the battery cover first, and then push down the top
3. Lock the battery lock to lock side

Figure 5 Lock battery lock



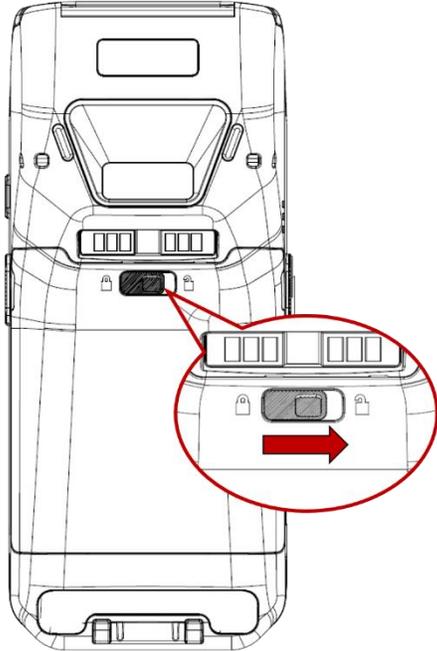
# Getting Started

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## Remove the battery

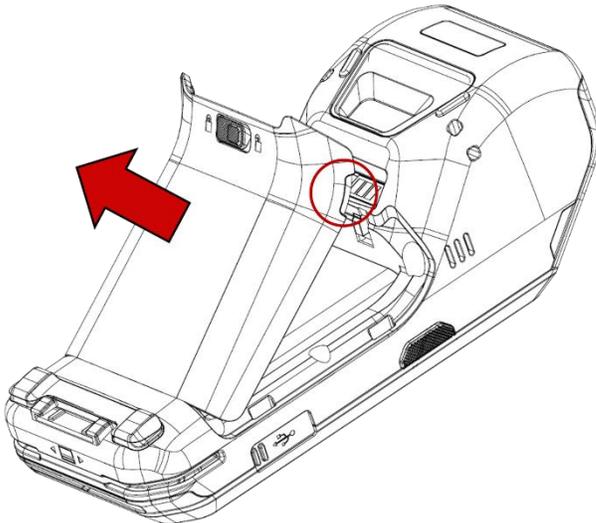
1. Release the battery lock to unlock side to open the battery cover

Figure 6 Unlock battery lock



2. Pull up the top of the battery cover using side holes

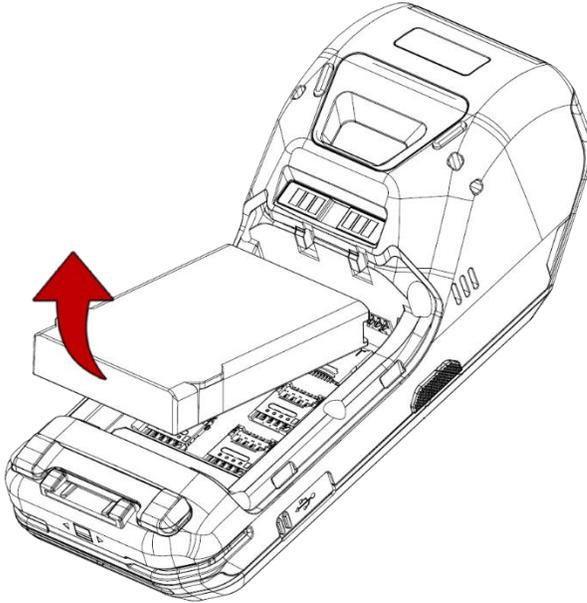
Figure 7 Open battery cover



# Getting Started

3. Lift the bottom of the battery

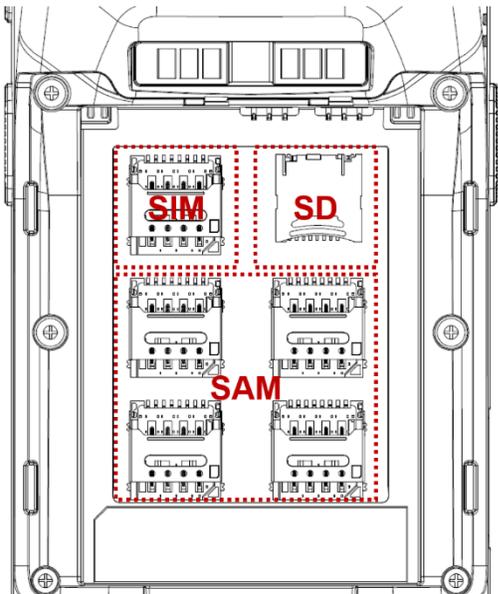
Figure 8 Removing battery



## SIM, SAM, and microSD cards

PM500 has 1 Micro SIM card slot, 4 PSAM card slots, and 1 microSD card slot. Find the correct slot for your card in **Figure 9**.

Figure 9 SIM & SD card slot



**Caution:** Use micro SIM card, micro SAM card, and microSD card only.

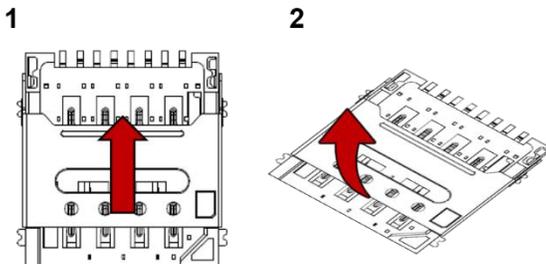
# Getting Started

## Install and remove SIM and SAM cards

Following steps describe how to install the SIM and SAM cards.

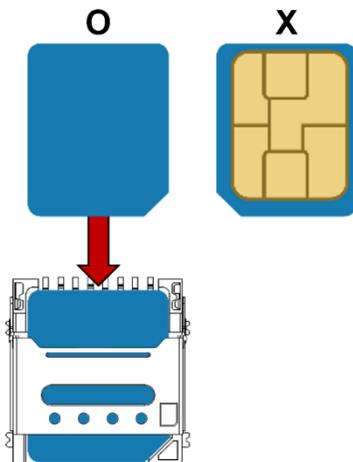
1. Open the battery cover and remove the battery
2. Slide the card holder up and swing upwards to open the holder (Refer to **Figure 10**)

Figure 10 Open SIM, PSAM slot



3. Facing down the gold contact of the cards, put the cards in the correct orientation.

Figure 11 SIM, PSAM card orientation



4. Put the holder down and slide it down to lock the holder

To remove the cards,

1. Open the card holder
2. Remove the card and slide the holder down to lock it

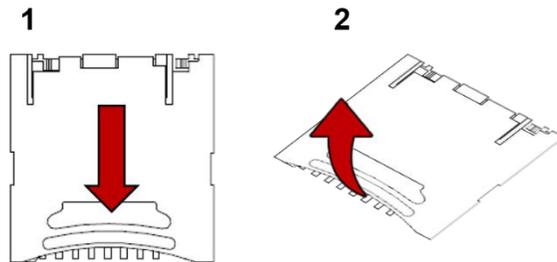
# Getting Started

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## Install and remove microSD card

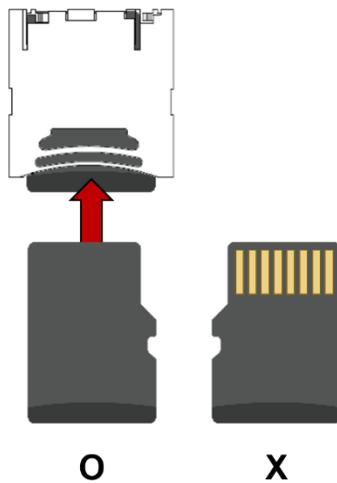
1. Open the battery cover and remove the battery
2. Slide the card holder down and swing upwards to open the holder (Refer to **Figure 12**)

Figure 12 Open SD card slot



3. Insert the card to the opened card holder in the correct orientation.

Figure 13 SD card orientation



4. Put the holder down and slide it up to lock

To remove the SD card,

1. Open the card holder
2. Remove the card from holder and put down the holder to slot
3. Slide the holder up to lock it

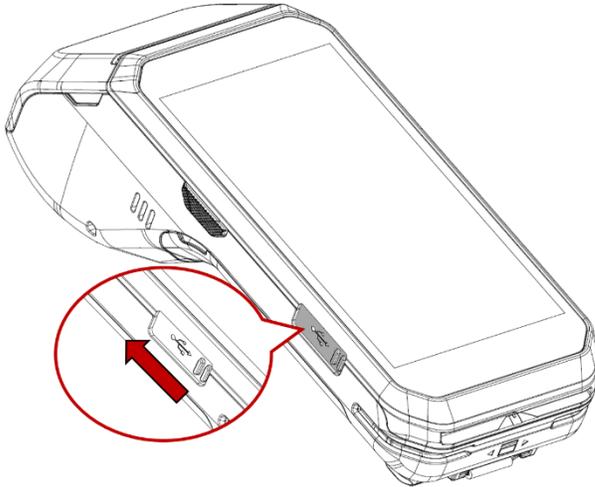
# Getting Started

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## Charge the device

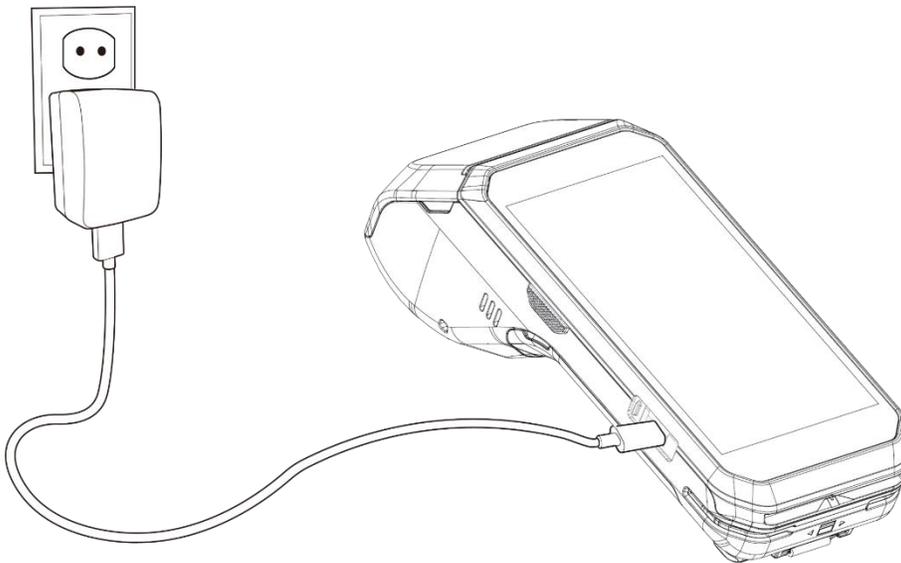
1. Open the cap of the USB connector on the left side of the PM500.

Figure 14 Open USB cap



2. Assemble the proper country plug and the AC/DC power supply.
3. Plug USB type C cable to the AC/DC power supply.
4. Connect the cable to PM500 and provide power by plugging the power supply to the wall socket.

Figure 15 Charging PM500



**Caution:** Always use an original charger and cable from Point Mobile. Other chargers and cables may damage PM500. Also, make sure the charger and cables are not wet.

# Getting Started

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## Battery Specification

Capacity	3,000mAh / 7.6V
Charging time	About 4 hours

## Smart Charging

PM500 supports three charging modes to provide optimal battery performance for your work. Each mode controls the charging current or the maximum charging level to meet the needs.

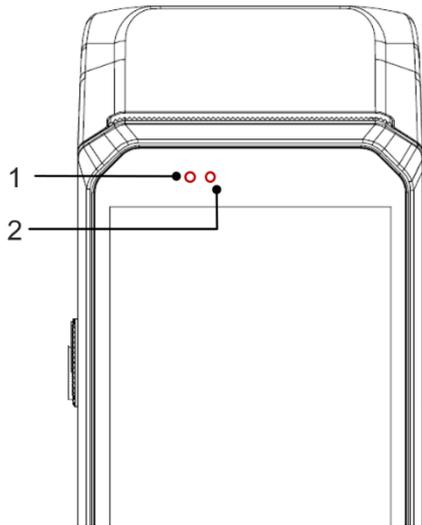
When the device is charged to the maximum charging level, the device turns to a fully charged state (Power LED lights green. Refer to [LED indicator](#)).

- **Normal mode (Default)**
  - Standard charging mode
  - Maximum charging level: 100%
- **Life-X mode**
  - limits the maximum charging level to extend the battery lifetime.
  - Maximum charging level: around 80%
- **Fast charging mode**
  - Charges PM75 faster than the other modes.
  - Maximum charging level: 100%

# Getting Started

## LED Indicator

Figure 16 LED indicator



No	Indicator	Status	Indication
1	Power LED	 Solid green	Device is completely charged
		 Solid red	Device is charging / Battery is low
		 Blinking red	Charging temperature is out of normal range / Battery is very low
		 Alternately blinking red & green	Cannot recognize the battery
2	Notification LED	 Solid red	Barcode reading failed
		 Solid blue	Barcode reading success
		 Blinking blue	Notification existing

# Getting Started

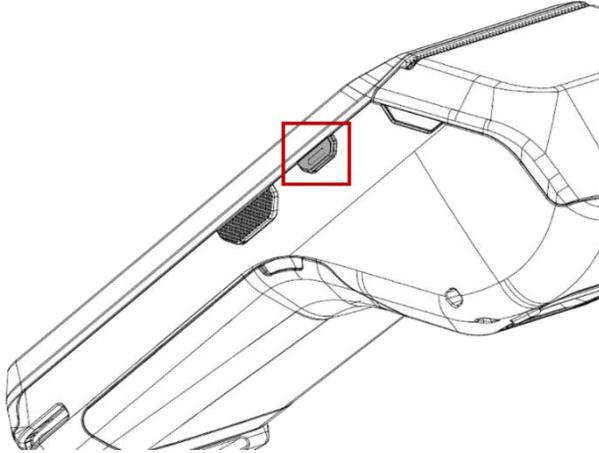
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## Turn on & off PM500

To turn on the device,

1. Press and hold the **Power** button on the right side of the PM500 for a few seconds

Figure 17 Power button



2. When **SMART BEYOND RUGGED** logo displays on the screen, release the button and wait until PM500 finish booting

To turn off the device,

1. Press and hold the **Power** button until the power menu is shown
2. Tap **Power off** among the menu

# Getting Started

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## Thermal Printer

### Paper Roll Recommendation

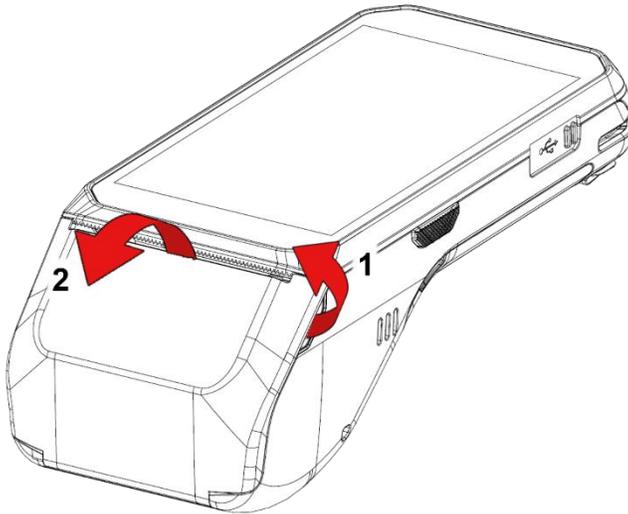
Purchase thermal paper roll, which is proper to PM500. Refer to the below specification of matching paper roll.

Specification	Precisions
Type	Thermal paper
Width	58mm
Diameter	40mm

### Paper Roll Installation

1. Pull the hole at both sides of the printer cover
2. Open the printer cover

Figure 18 Open printer cover

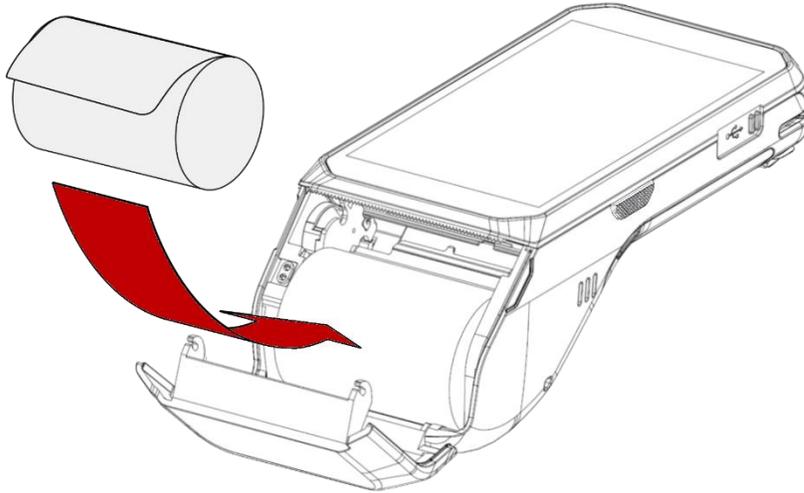


# Getting Started

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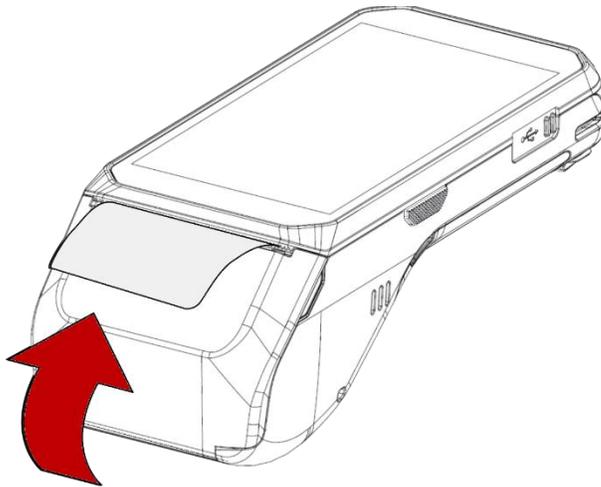
3. Referring to **Figure 19**, put the paper roll into the printer in the correct orientation. The end of the paper roll should be a little unrolled

Figure 19 Insert paper roll



4. Close the printer cover firmly

Figure 20 Close printer cover

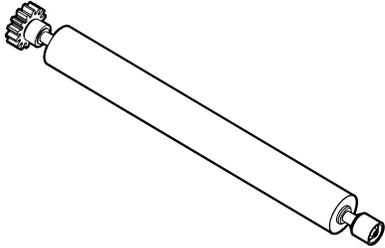


# Getting Started

## Reassemble Printer Roller

When the printer roller is separated accidentally, it can be simply reassembled.

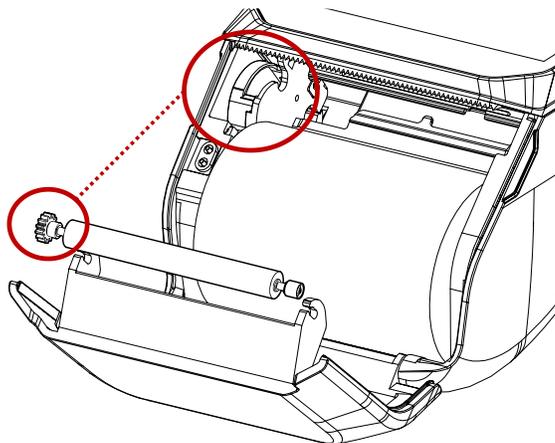
Figure 21 Printer roller



In order to reassemble the printer roller, follow the steps.

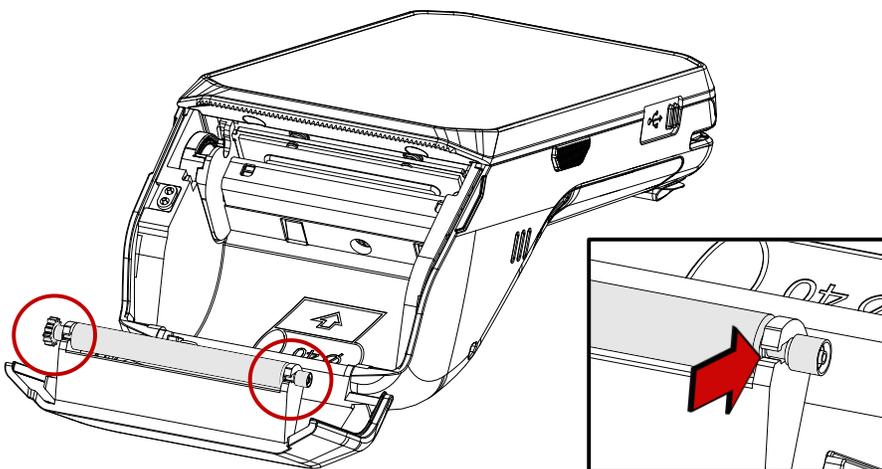
1. Open the printer cover
2. Align the printer cover with roller as correct orientation (Refer to **Figure 22**)

Figure 22 Printer roller orientation



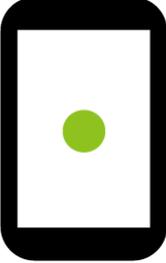
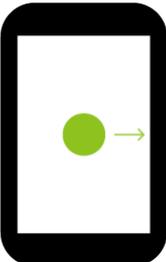
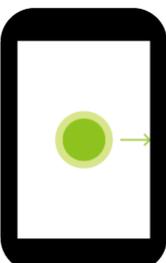
3. Until it clicks, push the both side of the roller firmly in the marked direction in **Figure 23**

Figure 23 Reassembled printer roller



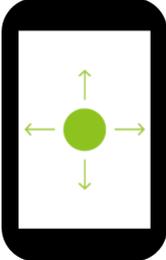
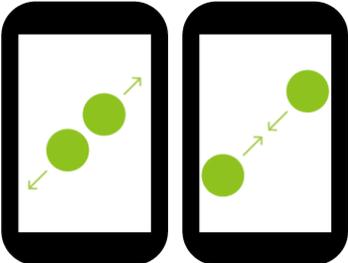
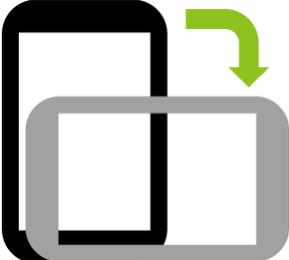
# Getting Started

## Use a touch screen

Action	Description
	<p><b>Tap</b></p> <p>One-finger press and release</p>
	<p><b>Double tap</b></p> <p>Tap twice quickly for "Zoom in"</p>
	<p><b>Long press</b></p> <p>Press and hold for "Select an item"</p>
	<p><b>Swipe</b></p> <p>Press and move, and then release for "Scroll" or "Tilt"</p>
	<p><b>Long-press drag</b></p> <p>Press and hold, and move for "Pick up and move" or "select multiple items"</p>

# Getting Started

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Action	Description
	<b>Scroll</b> Vertical or horizontal swipe in a single direction
	<b>Pinch Open &amp; Close</b> Two-finger press, move outwards and inwards, lift for "Zoom in and out."
	<b>Rotate</b> When PM500 is turning sideways, screen orientation is changing

# Payment

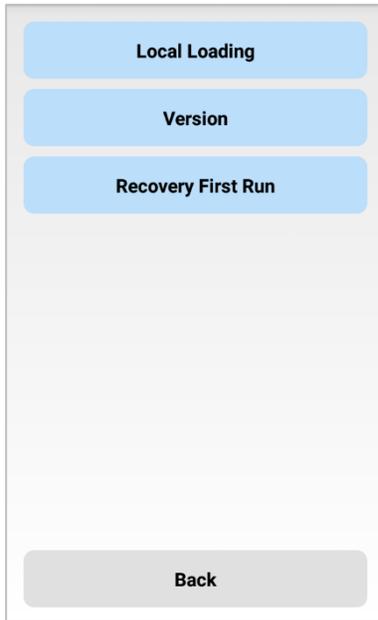
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## Master App: PciMaster

**PciMaster** is a service program for security. The keys and applications can run or be downloaded on the device through the master app.

When the device is running for the first time or triggered, the MasterApp will run automatically after device startup. Or you can execute **PciMaster** to start MasterApp manually.

Figure 24 MasterApp main screen



You can do below actions with MasterApp,

- Check the firmware version
- Download and run applications
- Recover the device from tamper scenario

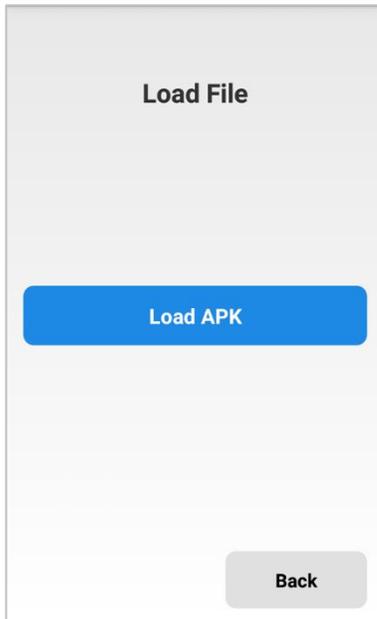
# Payment

## Download Application

To download the application from local,

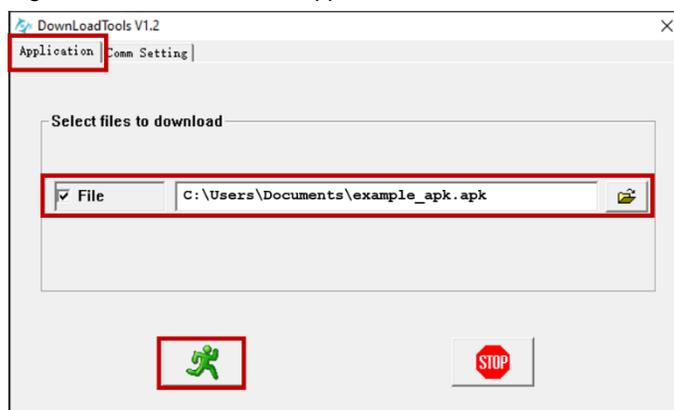
1. Connect device and PC through USB cable
2. Go to **Local Loading** > **Load Apk** from the main menu, then, MasterApp will enter application loading mode

Figure 25 MasterApp - Local Loading



3. On your PC, execute DownLoadTools.exe and set **Port** and **Baud** in Comm Setting tab
4. Go to **Application** tab and then, check **File** and browse desired apk file
5. Click 

Figure 26 DownLoadTools\_application



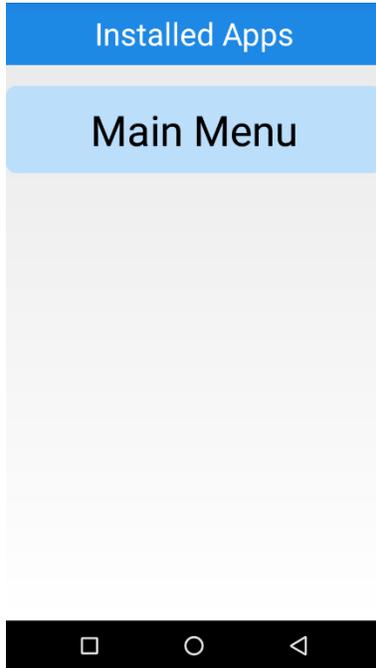
# Payment

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## Run Application

To run a payment application installed with administrator permission, tap the application which you want to run in the **Installed Apps** list.

Figure 27 MasterApp - Installed Apps



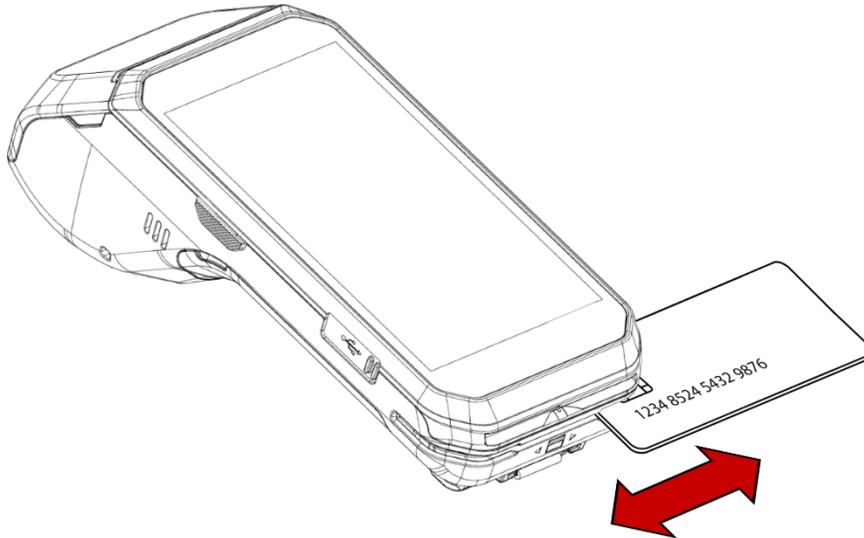
# Payment

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## Magnetic Stripe Card

To read a magnetic stripe card, swipe the card through the MSR (Magnetic Stripe Reader) at a proper and steady speed. The magnetic stripe must be facing down as **Figure 28**, and you can read the card bi-direction.

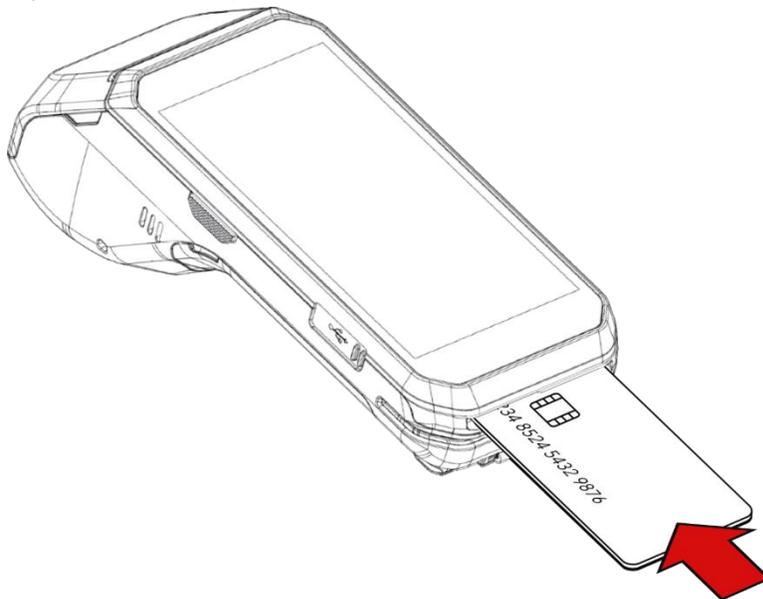
Figure 28 Magnetic stripe card payment



## IC Card

To read an IC card, insert the card to the ICCR (IC Card Reader) and wait for completing the transaction. IC chip must be facing up as **Figure 29**.

Figure 29 IC Card payment



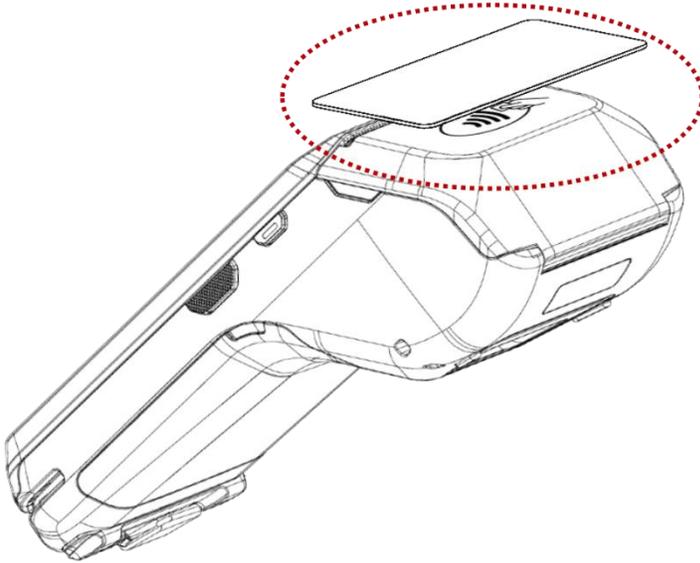
# Payment

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## Contactless Payment

Make contactless payment with NFC (Near Field Communication) feature. Bring the card close to the NFC symbol on the top of the PM500, and keep the position during the transaction.

Figure 30 Contactless payment

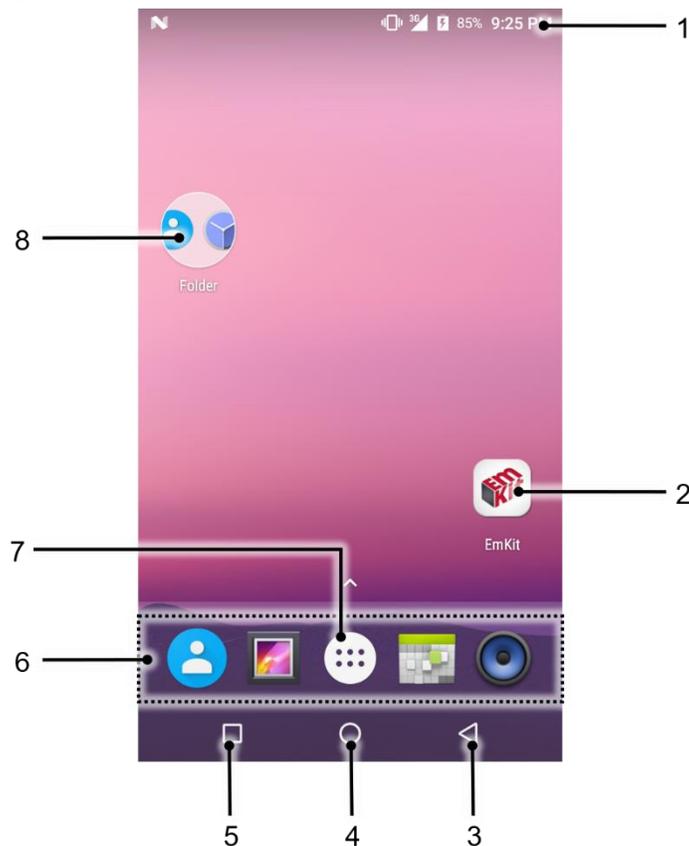


# Learning the basics

## Home Screen

Home screen is a screen displayed when you boot your PM500 or unlock the screen.

Figure 31 Home screen



No	Item	Description
1	Status bar	Indicate device status and notification.
2	App	Tap to run the application Long-press to see the application's options
3	Back	Tap to go to the previous screen
4	Home	Tap to go to the Home screen
5	Recent apps	Tap to show recently used applications
6	Favorites tray	Place the frequently used apps
7	App drawer	Tap to open the App drawer
8	App folder	Apps are organized in the folder. Tap to open the App folder

# Learning the basics

## Status Bar

### Icons

You can see the time, status icons, and notification icons on the Status bar.

- Status icons

Icon	Description	Icon	Description
	3G connected		LTE connected
	No SIM card installed		Airplane mode
	Strong signal		Weak signal
	No data connection		Connection issue
	Hotspot enabled		
	Wi-Fi turned on		Connected to a Wi-Fi network
	Bluetooth turned on		Connected to a Bluetooth device
	Battery is full		Battery is partially drained
	Battery is low		Battery is charging
	Battery is very low		Battery cannot be recognized
	Location service turned on		Using location service
			Alarm is set
	Scanner is turned on (Only for SKUs with scanner)		Scanner is turned on, but trigger is turned off

# Learning the basics

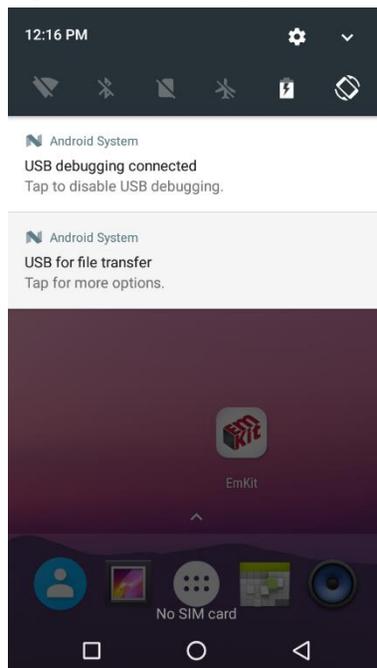
- Notification Icons

Icon	Description	Icon	Description
	OTG device connected		Connected to VPN network
	Upcoming event		Other input methods available
	Preparing SD card		SD card removed, unexpectedly
	File uploaded		File downloaded
	File copied		There are more notifications

## Notification Panel

Notification panel displays a list of notifications. You can respond to a notification by tapping it. To open the Notification panel, drag the Status bar down. If you want to close the panel, swipe it up.

Figure 32 Notification panel



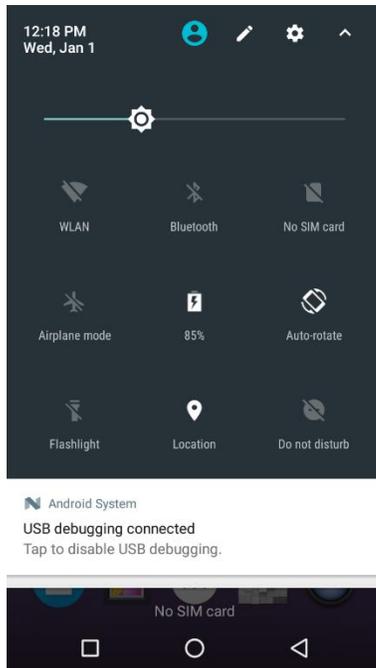
# Learning the basics

## Quick Setting Panel

In Quick setting panel, easily control some frequently used settings such as WLAN, Bluetooth. To use the Quick setting panel,

1. Open the Notification panel
2. Drag down the Notification panel

Figure 33 Quick setting panel



3. Tap a setting icon to enable/disable the setting or long-press an icon to see more detail

If you want to edit the configuration of Quick settings panel,

1. Touch  on the top of the Quick setting panel
2. By long-press and dragging the icon, you can customize the configuration of the panel

# Learning the basics

---

## Apps & Widget

### App Folder

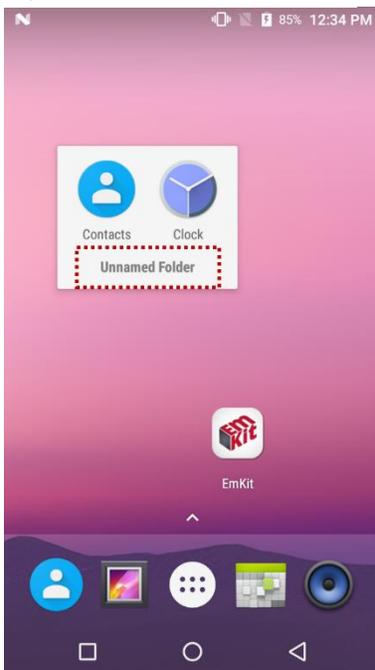
To create the app folder, long-press an app icon and drag it to another app icon.

Figure 34 Create app folder



If you want to set the folder name, tap the **Unnamed Folder** and input a new name.

Figure 35 Set app folder name



# Learning the basics

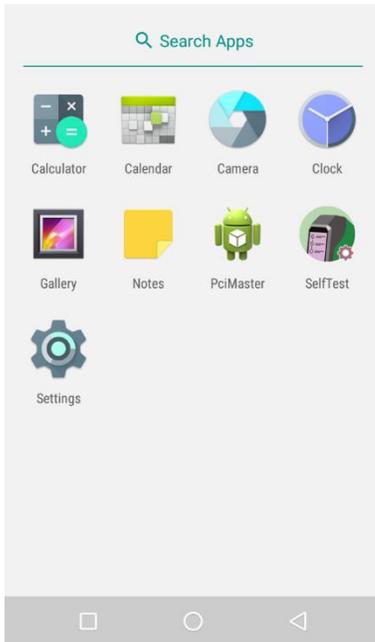
---

## App Drawer

All installed apps are listed alphabetically in App drawer.

- To open the App drawer, swipe up the Home screen or tap icon 
- To close the App drawer, swipe down the screen

Figure 36 App drawer



## Favorites Tray

To organize an app in the Favorites tray,

1. Long-press an app icon from the App drawer. Then, drag it slightly until the Home screen is shown
2. Place the app icon in the Favorites tray  
(If a toast message which means there is no room in the Favorites tray, remove an app you don't need from the tray.)

# Learning the basics

---

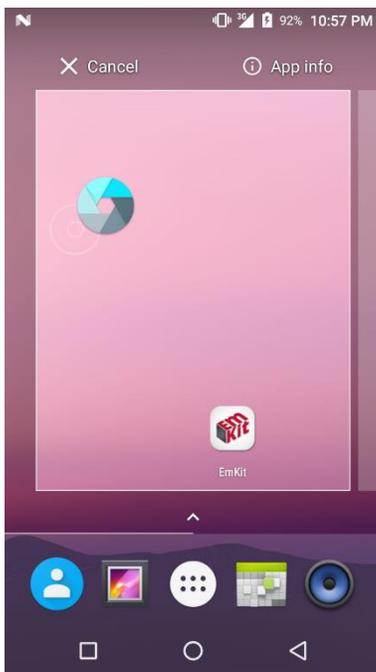
## Organize App in Home screen

To organize an app in the home screen,

1. Long-press an app icon from the App drawer. Then, drag it slightly until the Home screen is shown
2. Place the app icon where you want

(If you want to cancel to place the app, drag it to **Cancel** area and release)

Figure 37 Place app in Home screen



## Widget

To add a widget in the Home screen,

1. Long-press the blank space of the home screen
2. You can see the three menus, **WALLPAPERS**, **WIDGETS**, and **SETTINGS**

Figure 38 Widget menu

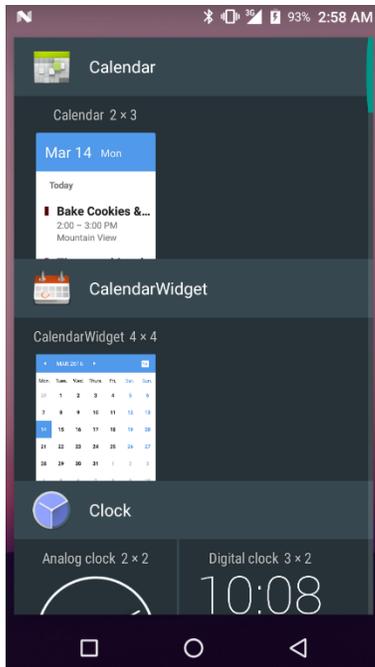


# Learning the basics

## 3. Tap **Widgets**

- Among the list, tap and hold the widget you want to add

Figure 39 Widget list

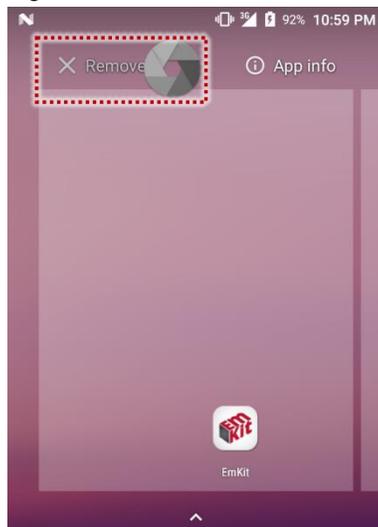


- Place the widget to the Home screen by dragging



**Note:** To remove an app or a widget from the Home screen, long-press and drag it to **Remove** area.

Figure 40 Remove from Home screen



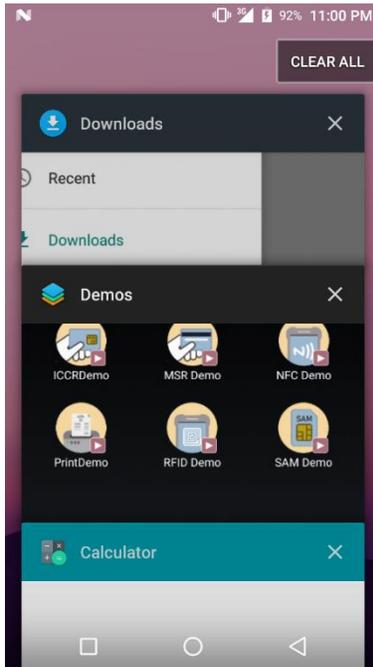
# Learning the basics

---

## Recently Used Apps

Tap **Recent apps** button on the bottom of the screen to see recently used apps. You can open an app from the list, or completely close the app by swiping it left/right. Tap **CLEAR ALL** to close all the apps.

Figure 41 Recently used apps

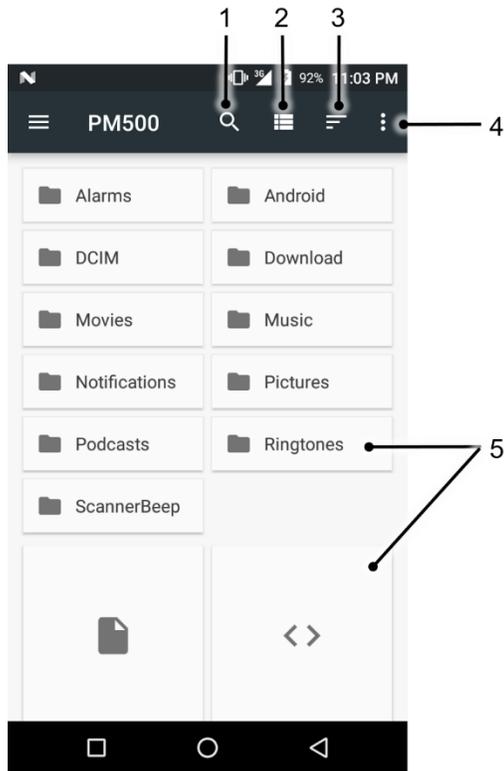


# Learning the basics

## Manage Files and Folders

To manage or share the files on the device, open **FileExplorer**  in App drawer.

Figure 42 FileExplorer main screen

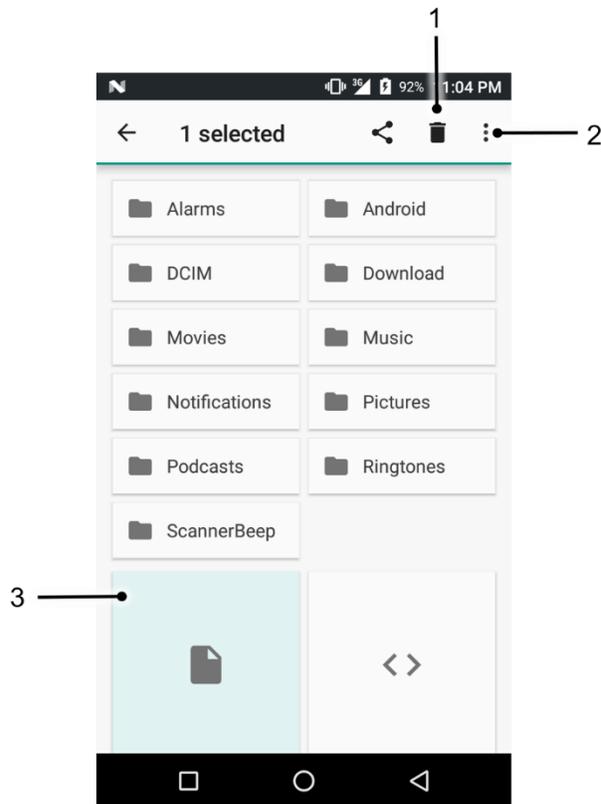


No	Description
1	Search a file
2	Change the view of the file list
3	Change the sort – Name / Modified Date / Size
4	Open the advanced option – Create a new window or folder
5	Tap a file or folder to open. Or long-press a file or folder to select

# Learning the basics

When you select a file or folder, the screen changes like below.

Figure 43 FileExplorer screen when file selected



No	Description
1	Delete the files or folders
2	Open the advanced option <ul style="list-style-type: none"> <li>- Select all: Select all files and folders</li> <li>- Copy / Move to: Copy or move the file to a new location</li> <li>- Rename: Rename the file or folder</li> </ul>
3	Selected file or folder is highlighted

# Learning the basics

## Settings

There are two ways to go to **Settings**:

- Open the App drawer and tap **Settings** 
- Open the Quick setting panel and tap gear icon 

## Adjust Display Brightness

To adjust the display brightness level,

- Open Quick setting panel and adjust display brightness bar
- Go to **Settings**  > **Display** > **Brightness level**

Figure 44 Brightness level

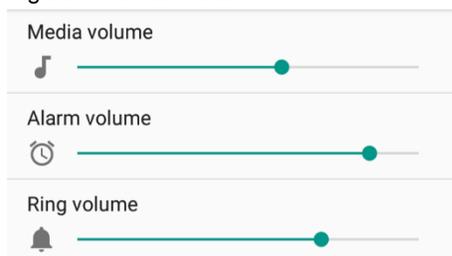


 **Caution:** Using high brightness levels for long periods may cause eye strain and increase battery consumption.

## Adjust Sound

To adjust volume, go to **Settings**  > **Sound** and control the Media, Alarm, Notification volume.

Figure 45 Volume bar



 **Caution:** Using high volume levels for long periods may cause ear strain and increase battery consumption.

# Camera

PM500 supports the front camera basically. Especially in SKU1~8, there is a rear camera, too.

To use the camera, open App drawer, and tap Camera . **Figure 47** is the main screen of the Camera application, and **Figure 46** is a screen that is displayed when you swipe the screen to the right.

Figure 47 Camera main screen

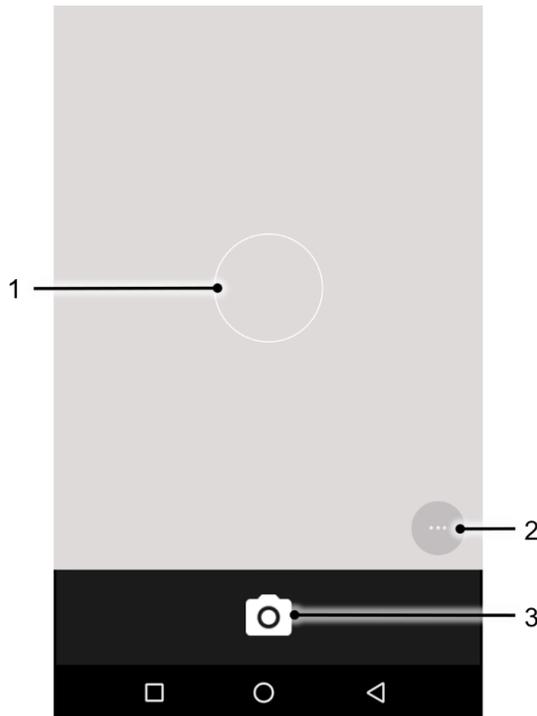
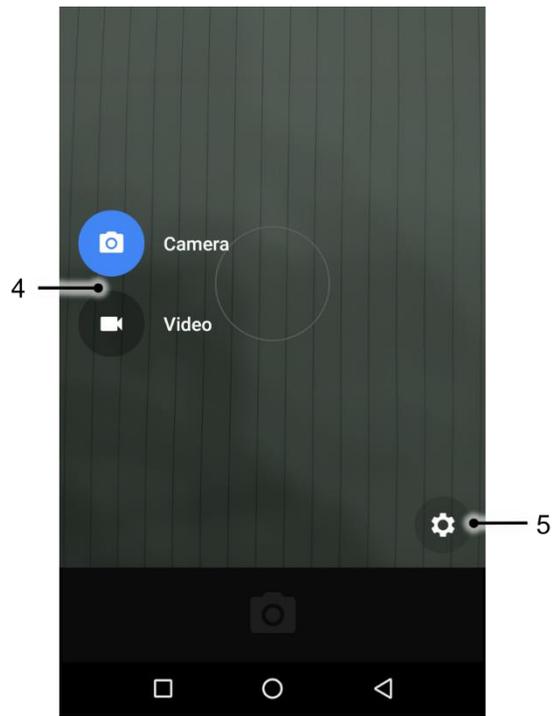


Figure 46 Camera mode change/setting screen



No	Name	Description
1	Focus zone	You can change the focusing area by touching the other area
2	Advanced camera option	 : Set timer  : Display the grid on the screen  : Activate or Deactivate HDR  : Set flash mode (Activate / Deactivate / Auto mode)  : Switch camera (Rear camera SKU only)
3	Shutter button	Take a picture or recode a video
4	Mode change button	Change the Camera or Video mode
5	Advanced camera setting	Set resolution & quality of the picture Enable / Disable saving location and manual exposure

# Scanner

---

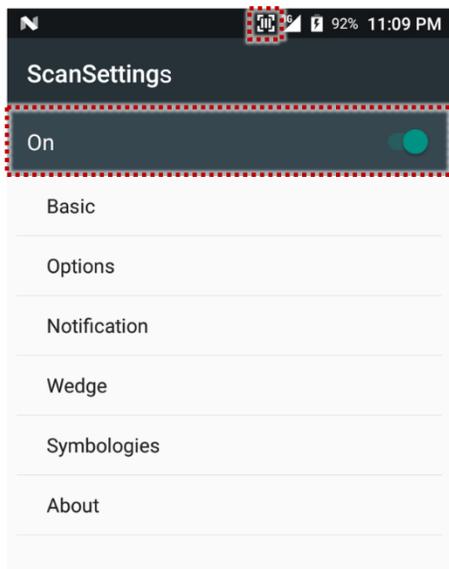
PM500 SKU9~16 has a scan engine on the back of the device instead of the rear camera. The scanner is disabled by default. Therefore, turn on the scanner to use.

## Turn on the Scanner

If you want to enable the scanner, follow the steps.

1. Go to **EmKit**  or **Settings**  and tap **ScanSettings**
2. Tap the toggle button to turn on/off the barcode scanner
3. Check if the scanner icon(  ) is placed on **Status bar**

Figure 48 Enable the Scanner



## ScanSettings

If you turn on the scanner, scanner setting menus will be displayed. **ScanSettings** consists of

- **Basic**
- **Options**
- **Notification**
- **Wedge**
- **Symbologies**
- **About**

# Scanner

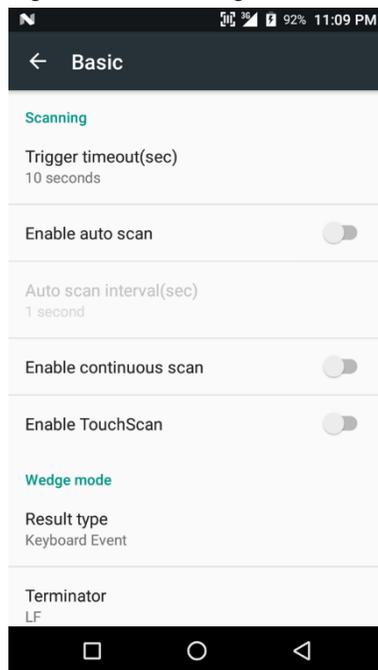
## Basic

In **Basic**, you can set the **Scanning** option and **Wedge mode** option.

### 1. Scanning

- You can change the scanner's **trigger timeout** and set **Auto scan & continuous scan**.
- You can use **TouchScan**, which is a software scanner button. Place a scan icon in any position and tap the icon to read a barcode.

Figure 49 ScanSettings - Basic



### 2. Wedge mode

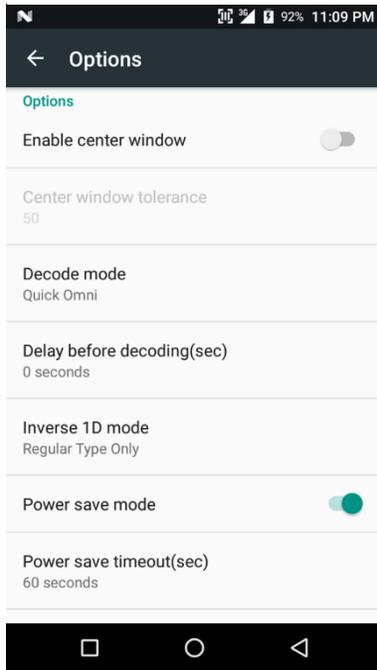
- You can change decoded scan data's **result type** handling 'User Message', 'Keyboard Event', 'Clipboard', or 'Intent Broadcast'. Also, you can set **Terminator** as 'None', 'Space', 'Tab', 'LF', 'Tap & LF'.

# Scanner

## Options

In **Options**, you can enable/disable the **center window & Aimer & Illumination** and set **Decode mode & Power save mode**.

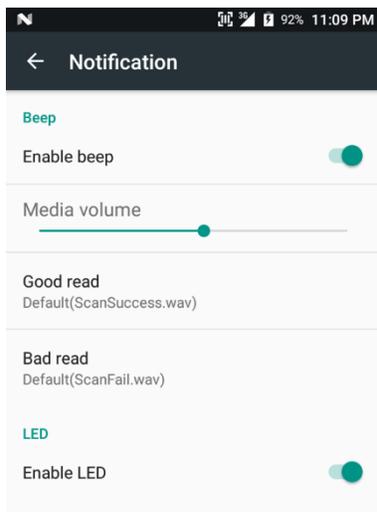
Figure 50 ScanSettings - Options



## Notification

In **Notification**, you can change or control the **beep sound**, and manage **LED** option

Figure 51 ScanSettings - Notification

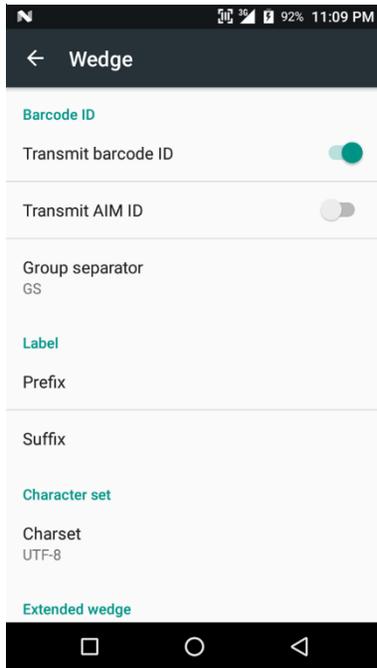


# Scanner

## Wedge

In **Wedge**, you can enable/disable the **Barcode ID** and **Aim ID**, set **Group separator**, **Prefix & Suffix**, **Character set**, and **Extended Wedge**.

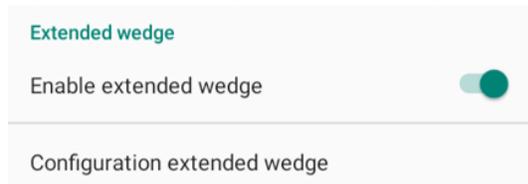
Figure 52 ScanSettings - Wedge



## Extended Wedge

PM500 supports Extended wedge that allows you to edit the decoded data. Tap **Enable extended wedge** toggle button, and then set a rule in **Configuration extended wedge**.

Figure 53 ScanSettings - Extended wedge

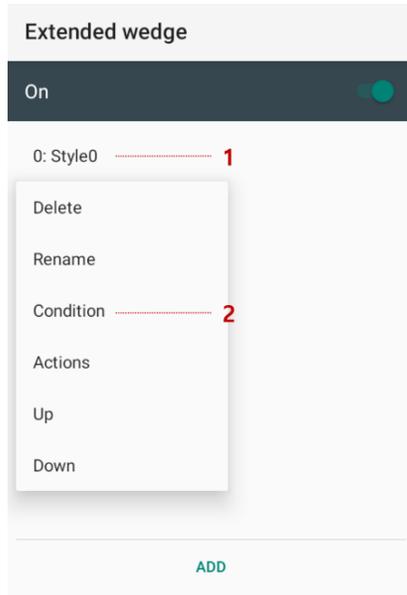


# Scanner

For example, if you want to add "Point Mobile" at the start of decoded data whenever decoding CODE128,

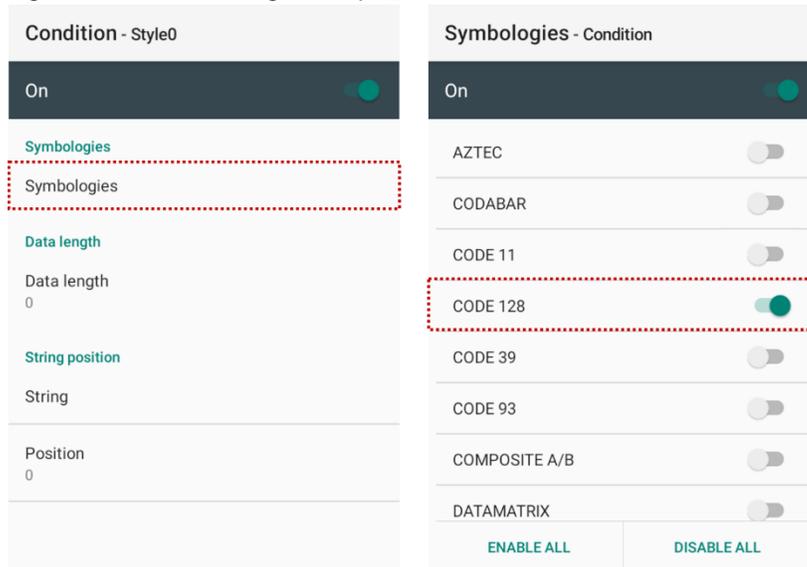
1. Tap **Style(1)** and select **Condition(2)**

Figure 54 Extended wedge example\_1



2. Tap **Symbologies** and select **CODE128** between the symbologies

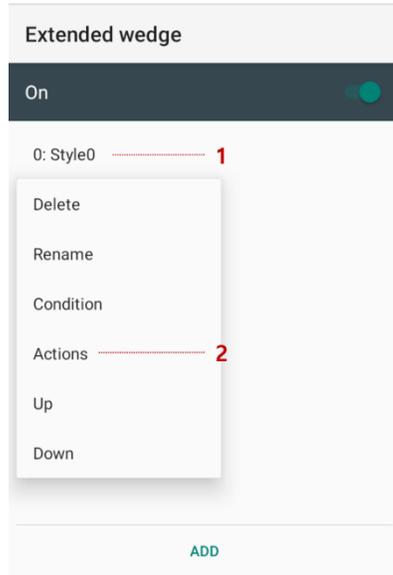
Figure 55 Extended wedge example\_2



# Scanner

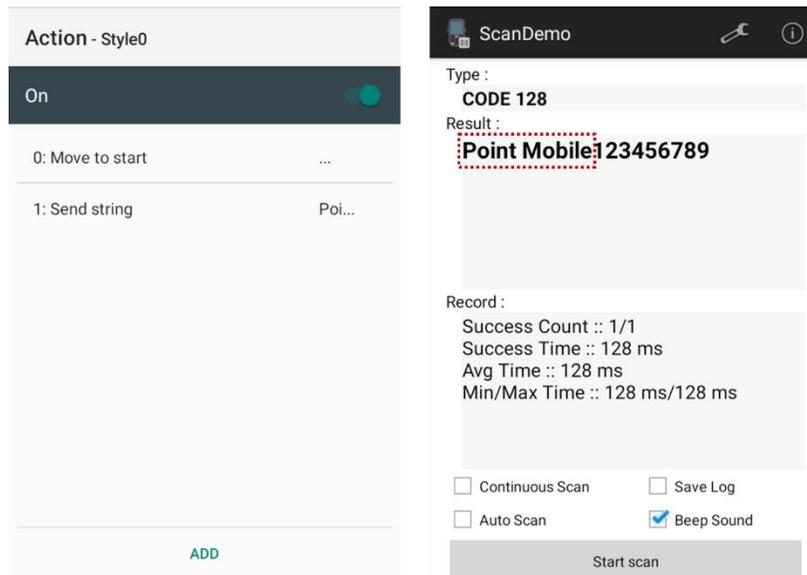
### 3. Tap **Style(1)** and select **Actions(2)**

Figure 56 Extended wedge example\_3



### 4. Tap **ADD** and select **Move to start** to point the start of the decoded data. And then, add another action of which **action type** is **Send string** and set **value** as "Point Mobile". Now you can get decoded data with "Point Mobile" text

Figure 57 Extended wedge example\_4



# Scanner

## Symbologies

In **Symbologies**, you can enable/disable specific barcode type or set a detail option. By tapping each symbology name, you can set a detail option.

Figure 58 ScanSettings - Symbologies

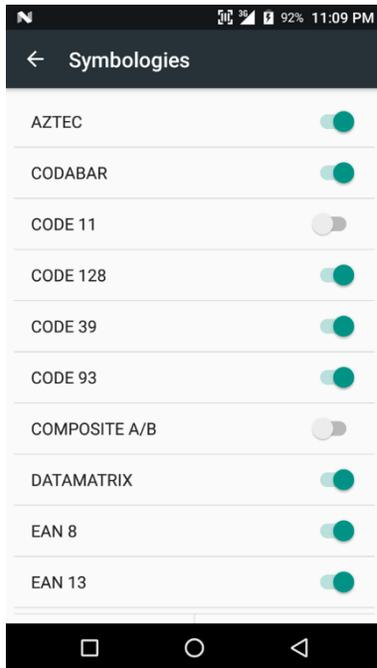
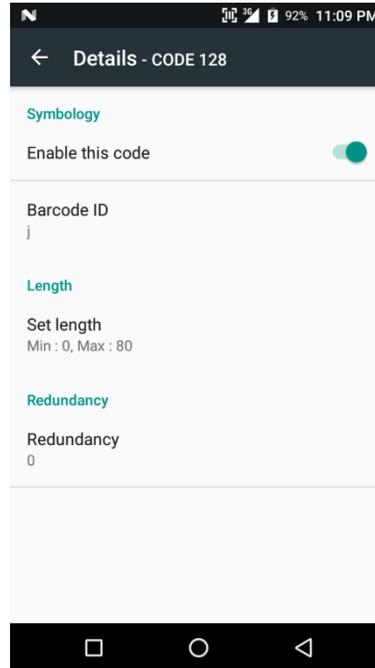


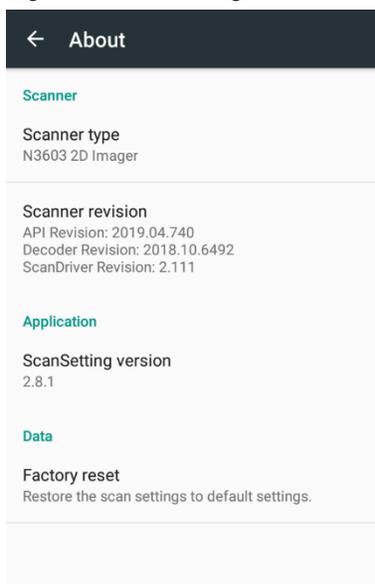
Figure 59 ScanSettings - Select a symbology



## About

In **About**, you can find your Scanner's information and restore Scanner's settings to default.

Figure 60 ScanSettings - About



# Scanner

## Scan a barcode

Center the cross-hair laser aimer over the barcode. The entire barcode must be inside the illumination square.

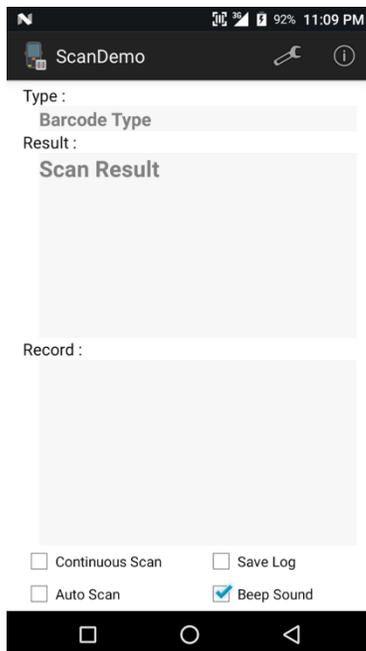


## ScanDemo

After turning on the scanner, you can test the scan feature with **ScanDemo**.

1. Execute **EmKit**  > **ScanDemo** 
2. Scan a barcode by pressing the scan button
3. Find scan result

Figure 61 Scan Demo



# Wireless

## Cellular Network

To connect cellular network,

1. Insert a micro SIM card to the SIM slot. Refer to [Install and remove SIM and SAM cards](#)

 **Caution:** Use micro SIM card only.

2. Check if the cellular network icons (  or  ) appeared on the status bar and try to connect to the internet

Figure 62 3G icon

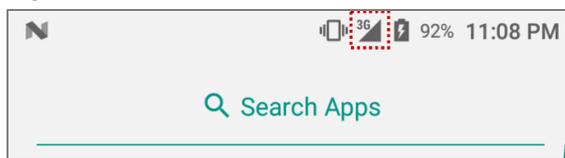
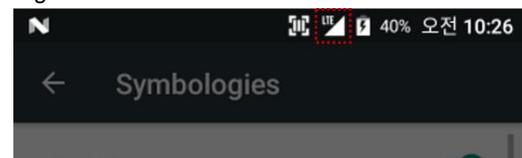


Figure 63 LTE icon



You can find the network information and adjust the network settings in **Settings**  > **(Wireless & networks) More** > **Cellular networks** and **Settings**  > **(Wireless & networks) Data usage**

Figure 64 Cellular network setting

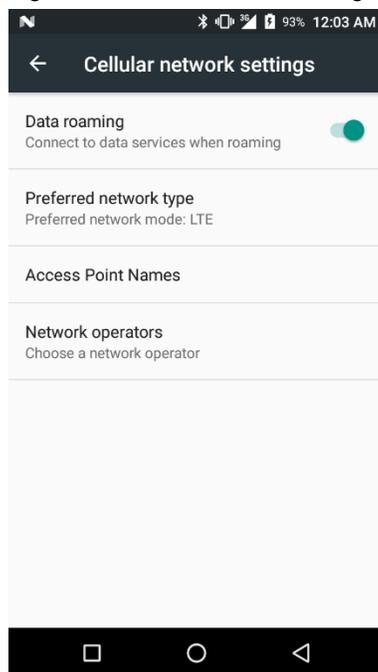
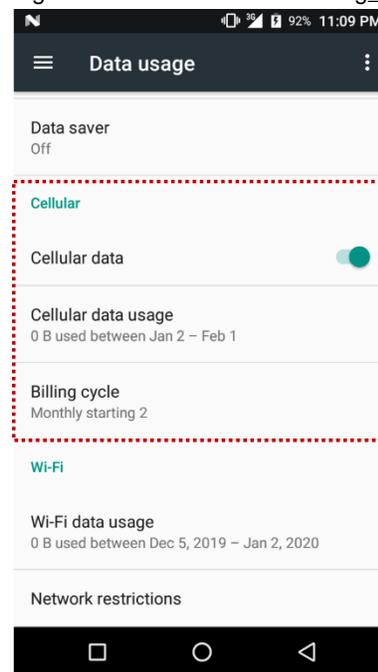


Figure 65 Cellular network setting\_2



**Note:** PM500 can connect to cellular network, but cannot use the phone feature because PM500 doesn't have a microphone and receiver.

# Wireless

## WLAN

1. Go to **Settings**  > **WLAN**
2. Tap the toggle button to enable WLAN
3. Device searches for nearby APs and each SSID will be listed by signal strength
4. Select a SSID you want to connect
5. The message **Connected** under the SSID means the device complete connecting to the WLAN

Figure 66 WLAN connected



 **Caution:** PM500 cannot connect to Open WLAN network because of security. Make sure that the selected WLAN is not open WLAN network. You can tell those apart by lock icon (  ). To connect the Secured WLAN network, you need to enter the password.

Open WLAN network	
Secured WLAN network	

## NFC

PM500 supports NFC (Near Field Communication) feature. You can make contactless payments and read/write the information of tag. Find NFC tagging location in [Contactless payment](#).

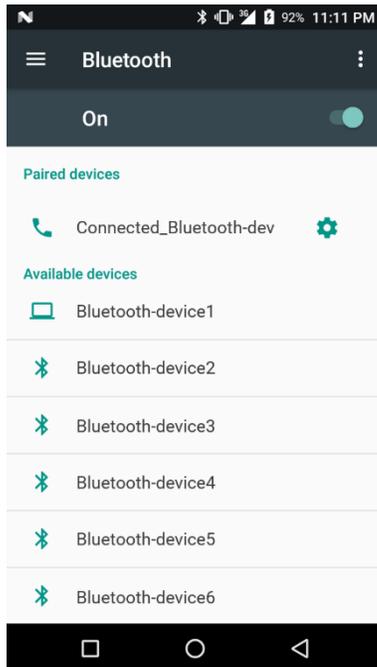
# Wireless

## Bluetooth

If you want to pair with a new device,

1. Go to **Settings**  > **Bluetooth**
2. Tap the toggle button to turn on the Bluetooth
3. Select the desired device in **Available devices**
4. Check the pairing code in the dialog, tap **PAIR**

Figure 67 Pair new device



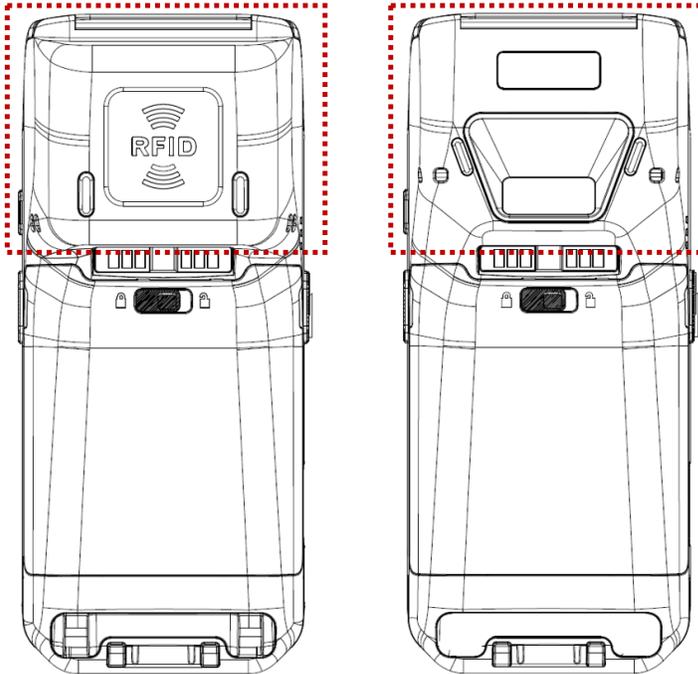
 **Caution:** PM500 cannot connect with Just-works Bluetooth devices due to security.

# Wireless

## UHF RFID

PM500 SKU17~20 supports UHF RFID reading instead of the rear camera and scan engine. Difference between UHF RFID SKU and the others can find in **Figure 68**.

Figure 68 Difference UHF RFID SKU



## RFID Settings

**RFID Settings** is an app for enabling RFID feature and setting RFID configuration. **RFID Settings** is pre-installed on PM500 and is located in **EmKit**. To run this app,

1. Open **EmKit**  from App drawer or home screen
2. Tap **RFID Settings** 

This user manual explains only brief information of RFID Settings. Please find more detail in **RFID Settings User Guide for PM500**.

# Wireless

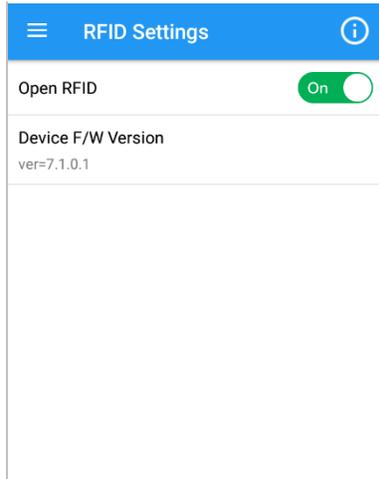
---

## Open RFID

PM500 RFID function is disabled by default. To read RFID tags, turn on RFID function on the main screen of **RFID Settings**.

Tap the **Open RFID** toggle switch until the switch turns to **On**.

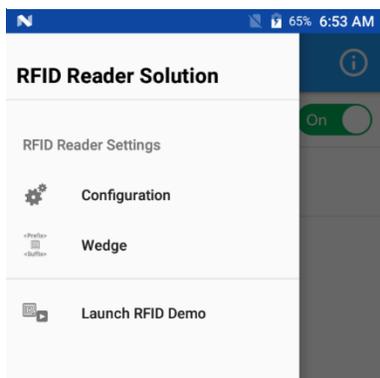
Figure 69 Open RFID



## RFID Configuration & Wedge

After open RFID, use can access Configuration and Wedge settings. Tap **☰** to open the side menu bar and select **Configuration** or **Wedge**.

Figure 70 RFID Settings - Side menu bar

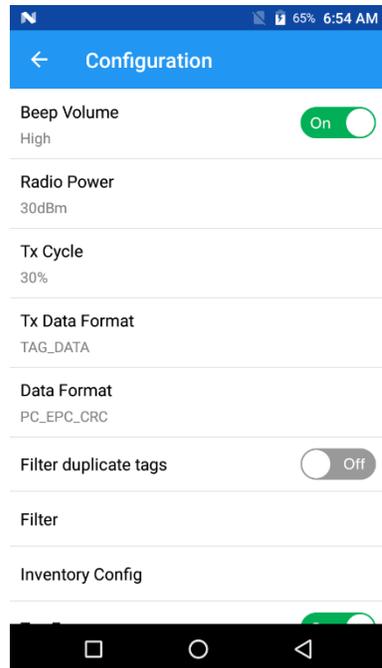


# Wireless

In **Configuration**, user can set up the below values.

- Beep Volume
- Radio Power
- Tx Cycle
- Tx Data Format
- Filter duplicate tags
- Filter
- Inventory Config
- Tag Focus
- Fast ID
- Continuous Read
- Auto Read
- Auto read interval
- Save Log
- Reset RFID Setting

Figure 71 RFID Settings - Configuration



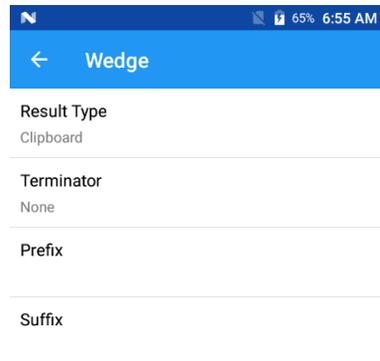
# Wireless

---

In **Wedge**, user can set up the below values

- Result Type
- Terminator
- Prefix
- Suffix

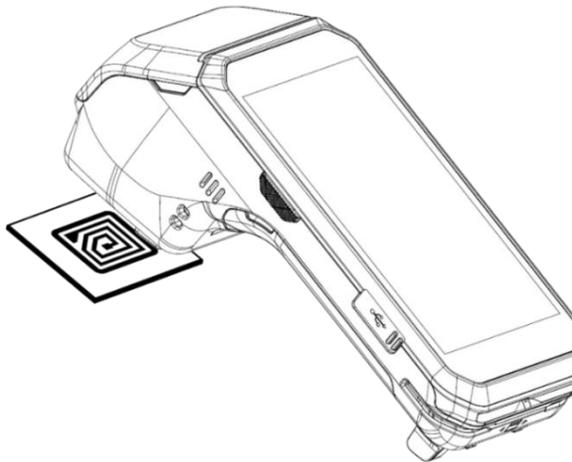
Figure 72 RFID Settings - Wedge



## Read RFID Tag

After open the RFID, aim and read RFID tag referring to **Figure 73**.

Figure 73 Reading RFID tag



# Wireless

For triggering the RFID read action, press left or right scan button on the PM500 or tap **Read RFID Tag** on the **RFID Demo**.

Figure 74 RFID read trigger button

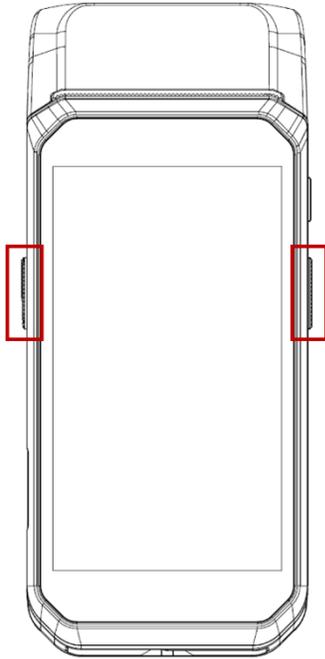
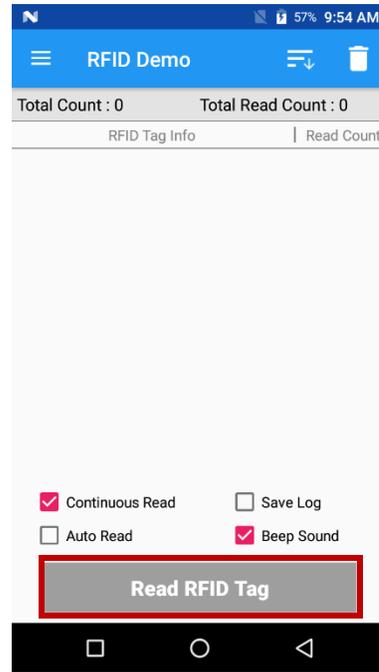
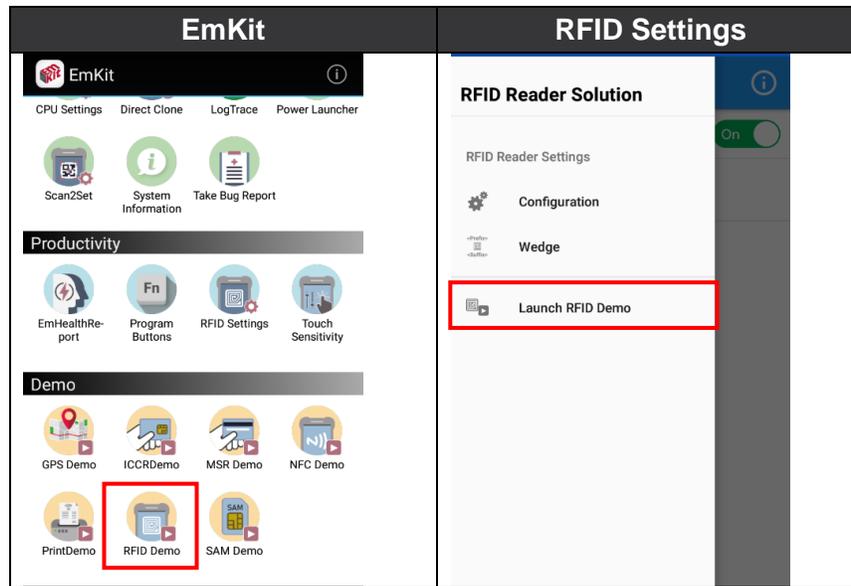


Figure 75 RFID Demo



**Note:** *RFID Demo* is an application for demonstrating the RFID tags reading. The app is pre-installed on PM500 same as **RFID Settings**. To launch the app,

- Tap **RFID Demo**  from **EmKit** 
- Open the side menu bar on the **RFID Settings** and tap **Launch RFID Demo**



# System Maintenance

---

## System Information

There are two locations for checking system information.

First, you can find the following information in **Settings**  > **About phone**,

- Status
  - Battery & SIM status
  - IMEI information
  - IP & WLAN MAC address
  - Bluetooth address
  - Serial number & Uptime
- Legal information & Certificates
- Model
- Hostname
- Android version & Android security patch level
- Baseband version
- Kernel version
- Build number

Second, the following information is in **EmKit**  > **System Information**,

- Processor information
- Version information (Android version, OS image version, SDK version, etc.)
- Manufacturer information (Serial number, Part Number, etc.)
- Device information (Camera, Audio parameter, display, etc.)
- Battery information (Battery charging status, etc.)
- Application Version info (Version of Demos and Tools)

# System Maintenance

## OS Update

To improve the performance of your device, Point Mobile provides up-to-date OS (Operating System) version. Please find how to update the OS in PM500 OS Update Guide document.

## Factory Data Reset

When you have a problem with your device or want to reset your device, follow the steps below to do a factory data reset.

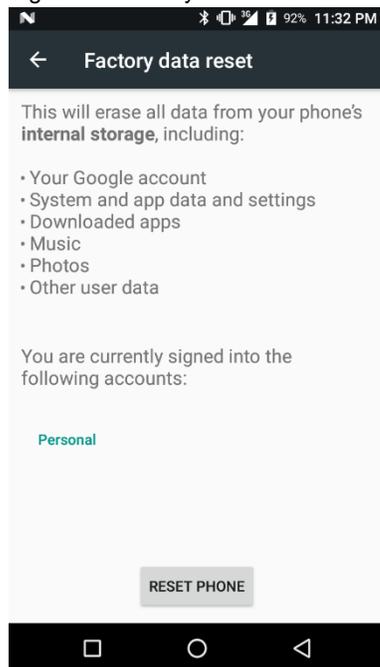


**Caution: Factory data reset will erase all security keys, personalized settings, and data saved in your device. And factory data reset cannot undo. After resetting the system, you should set up the administrator's password, keys, etc. again.**

1. Go to **Settings**  > **Backup & reset** > **Factory data reset**
2. After being aware that factory reset will erase all data from the internal storage, Tap **RESET**

### PHONE

Figure 76 Factory reset screen



3. Tap **ERASE EVERYTHING** to start the factory reset process

# Cradle (Optional Accessory)

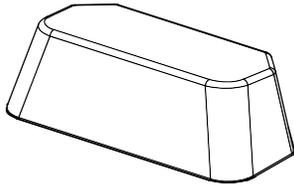
## Single slot PSTN Cradle (SPC)

### Attach Rubber Support

The standard package of SPC contains a rubber support for SKU 1~16 (SKUs with rear camera or scan engine). It supports the PM500 so that the device can be mounted stably.

**i** **Note:** SKUs with RFID antenna (SKU 17~20) doesn't need to attach the rubber support.

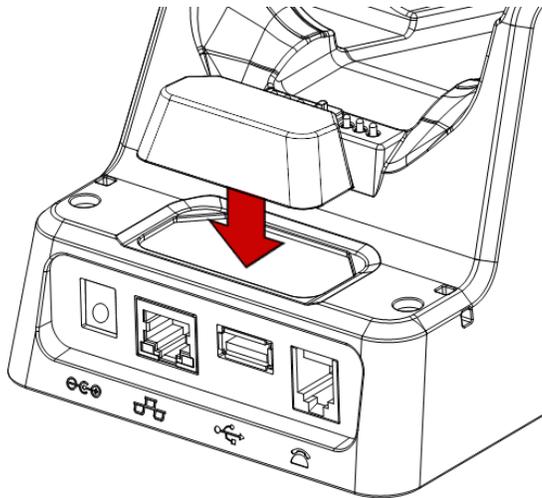
Figure 77 Rubber support



In order to attach the rubber support to the cradle,

1. Clean the surface of rubber support attaching area of the cradle
2. Remove the release liner on the back side of the rubber support
3. Attach the rubber support to the cradle firmly

Figure 78 Attaching rubber support

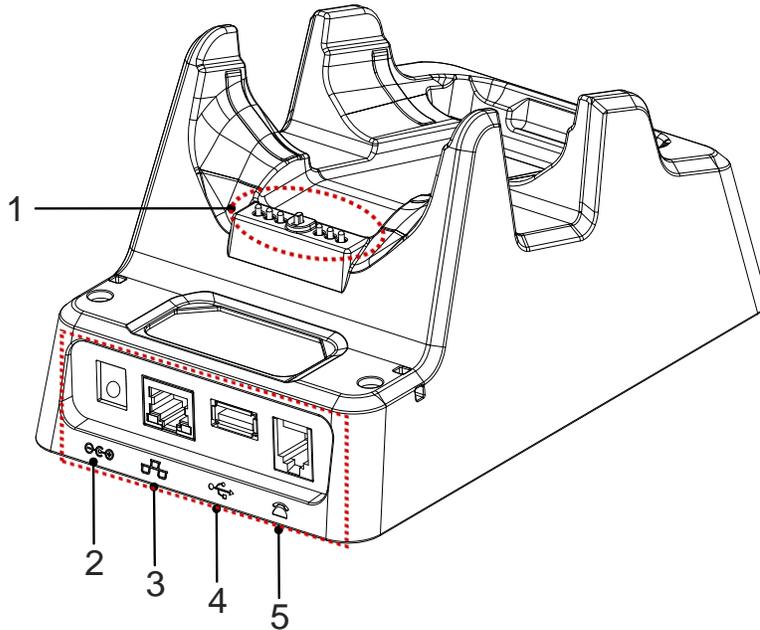


# Cradle (Optional Accessory)

## Ports

Single PSTN cradle supports Ethernet, PSTN, and USB-Host connections ports, and DC-jack for power. Find the location of each port in **Figure 79**.

Figure 79 SPC ports



No	Port	Description
1	Dock connector	Plug PM500 by contacting this point to PM500's dock connector
2	Power	DC-Jack. Provide power to cradle and charges PM500 with cradle
3	Ethernet	RJ45 socket. 10/100 Ethernet connection port
4	USB-Host	USB 2.0 Standard type A. Supports only HOST mode
5	PSTN	RJ11 socket. PSTN connection port

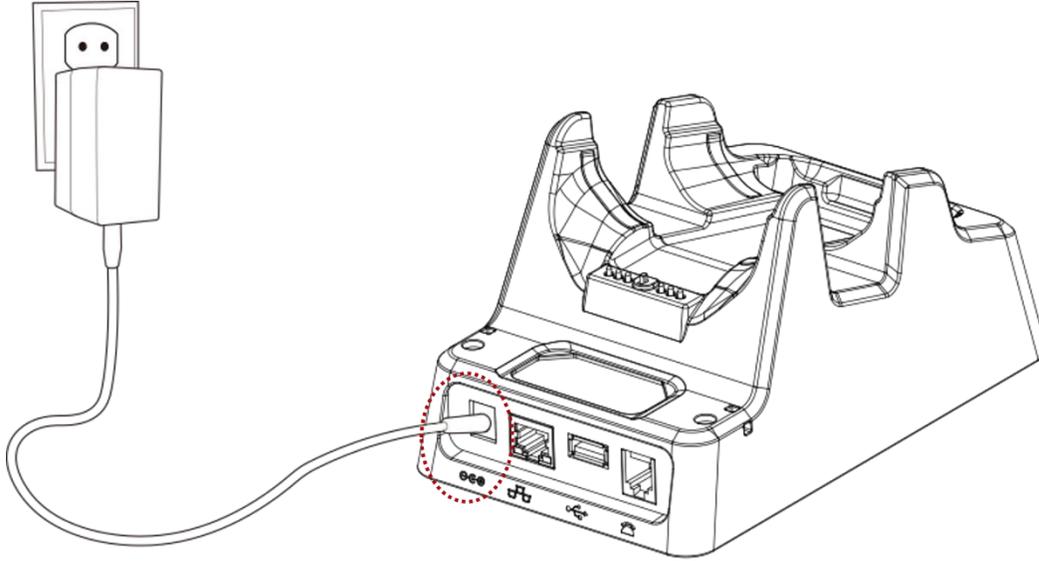
# Cradle (Optional Accessory)

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## Provide Power to Cradle

To use PM500 with cradle, provide power to the cradle by DC-jack like **Figure 80**.

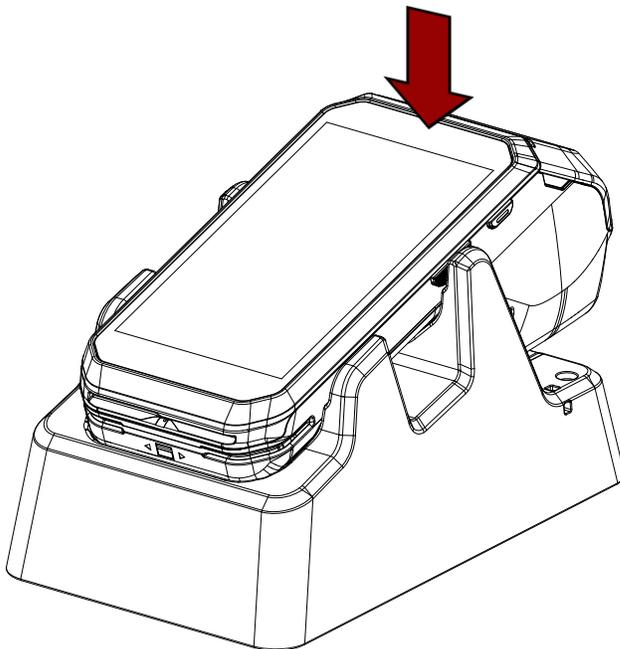
Figure 80 Providing power to cradle



## Install PM500

Align the cradle's dock connector with PM500's I/O connector, and put the device on the cradle. PM500 will seat and join with the cradle. Power LED of PM500 will light on red or green to confirm the connection.

Figure 81 Install PM500 to cradle



# Cradle (Optional Accessory)

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## SSC / SEC (Single Slot (Ethernet) Cradle)

SSC (Single Slot Cradle) and SEC (Single Slot Ethernet Cradle) have one device slot so that it can charge a PM500.

Following PM500 can be installed on SSC / SEC.

- PM500 with rear camera (SKU 1~8)
- PM500 with scanner (SKU 9~16)

 **Note:** Cannot install PM500 RFID SKU.

In addition to the charging function, the cradles also provide communication port(s) as follows.

- SSC: USB-Host port
- SEC: USB-Host port, Ethernet port

For more detail, refer to PM500 SSC / SEC Quick Start Guide.

Figure 82 PM500 SSC, SEC



# Security

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## Tamper Protection

PM500 meets PCI PTS security requirements. You should inspect the tamper evidence listed below periodically for keeping the security of your device.

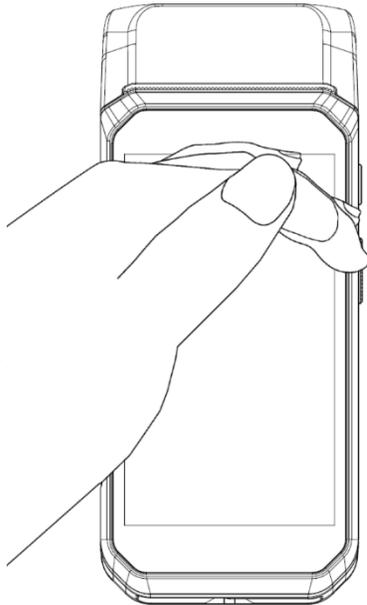
- Serial number on the back label is same as the one recorded in system. Refer to [System Information](#) to find the serial number in system
- ICCR; any obstruction or suspicious objects are attached
- MSR; other readers or suspicious objects are attached
- Cuts, holes, cracks, wires, additional stickers, glue marks, and any other suspicious elements

When any tamper evidence is detected, the message “**Tamper Detected**” displays. The device won't be recovered even if you reboot the device. If your device is in tampered state, you must stop using it and contact the device maintenance or authorized center immediately.

## Entering PIN

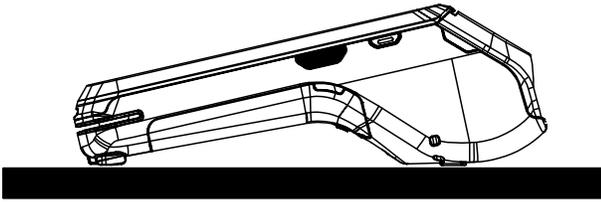
Cardholder will cover the key area with one hand during entering PIN (Refer to **Figure 83**). In this way, the key area will not be seen except the cardholder. It can protect the secret code from peeping by the others.

Figure 83 Cover the screen during entering PIN



# Safety Information

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PM500 is a desktop device that is typically used while placed on the structure such as a table or counter. When using PM500 holding in hand, keep separation distance of at least 20 cm from the user's body.

Please note PM500 is a battery-embedded design with a removable battery. Unauthorized personnel is strictly prohibited from disassembling the device.

## Battery Safety Information

Follow the battery safety guidelines for safe usage, storage, and disposal of Li-ion batteries. Improper battery use may result in a fire, explosion, or other critical hazards.

### Battery Safety Guidelines

- Use only Point Mobile approved batteries and charging accessories. Other batteries and chargers may damage the device or result in a fire, leakage, or other hazards.
- Do not expose the battery to excessive heat or cold.
- Do not use or store the battery in or near areas that might get very hot, such as in a parked vehicle, near a heat duct or close to other heat sources.
- Do not allow objects that may cause a short circuit, such as metal objects, corrosive substances, or liquids like water, to contact the battery.
- Do not disassemble, crush, bend, shred, press, or other actions that may damage or deform the battery.
- Do not use or replace the battery on the go or from a high location. Dropping may result in an explosion or fire.
- Do not put any labels, stickers, tags, etc. on the device or battery. Performance of the device or battery, such as sealing, drop, or tumble, could be affected.
- Close supervision is necessary when used near children to avoid the risk of injury.

# Safety Information

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- If battery leakage is observed, avoid any contact with the skin or eyes and properly dispose of the battery. If contact has been made, wash the affected area with water for 15 minutes and seek medical advice.
- If you notice any type of damage to the battery, such as swelling, dents, and leaks, stop using it immediately and contact Point Mobile.

## Battery Charging Guidelines

- Charge the battery in a clean, cool, dry, and ventilated environment.
- Separate the charger from the battery as soon as possible when the battery is fully charged.
- Battery performance can degrade due to the stress of daily charging and discharging. Batteries typically need to be replaced after 300 to 500 charging cycles (full charge-discharge cycles) or when the battery capacity has been reduced to 70 ~ 80% of its original capacity. The actual number of charging cycles varies based on usage patterns, temperature, age, and other factors.

## Battery Storage / Disposal Guidelines

- Store the batteries in a clean, dry and ventilated environment within ambient temperature ranges of  $20\pm 5^{\circ}\text{C}$ .
- For safety regulations, batteries are charged to below 20~30% of full capacity during production.
- When not using batteries for a long period, charge the battery for 30 minutes to 1 hour at least once every 6 months to prevent full discharge and keep the performance.
- Batteries should be stored separately when storing for long periods. Disconnect from any device, charger, or cradle.
- Dispose of used batteries promptly according to local disposal regulations.
- Do not dispose of the battery in fire. It may cause explosion.



**Notice:** The battery is consumable. Point Mobile provides a warranty for the battery for 12 months after purchase.

If you suspect the battery swelling, change the battery immediately and contact Point Mobile.



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