

## Manual

(FCC ID: 2ABRWF-1020)



### User's Manual

- . Please read the following warnings before using the product.
- . Shapes and colors of the images shown in this manual may differ from the actual products.

## User's guidance

- This product is qualified by KCC, FCC/IC, CE, PCI-PTS(V3.1), EMV L1, L2(V4.3) compliances, and is thus governed by these qualifications safety regulations.
- This user manual is protected by copyright.
- This user manual has been created by the SAMIL CTS Inc. We have done our best not to create typos, editing errors, and leaving out any information. Please understand if there are any inconveniences.
- This product's program is legally protected. Illegal copying, transmitting, or erasing of the program is prohibited.
- This product's partial functions might have problems from the environment, user program, and other machines.
- The radio equipment can't be used for life saving services because there is possibility to have radio interference and failure.

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## Notice Before Using Device

**WARNING** This information is for your own safety. Please observe the following precautions.

- Do not press power button on the device if the device is wet or do not touch charge cable with wet hands.  
There is risk of electric shock.
- Do not remodel, take apart, or repair the device. Please refer to your customer service center. If not the case, you will not be able to get your free repair service.
- Please follow instructions when using the battery.
- Do not use your device at an explosive danger zone.
- In case your device is wet, do not put your device in heaters, microwaves, or etc to dry- there is a risk of explosion or it can be the cause of malfunction.
- Do not use in places of high temperature and high humidity. The following can be the causes of malfunction: getting wet from the rain, spilling drinks, and taking it in with you at the sauna (high temp.) In these cases, you cannot receive your free repair service.
- Please avoid impacts or vibrations. When the device is not in use, unplug the USB cable and place it at a safe place where it won't drop.
- When a battery is not in use for a long time, please charge and store it at room temperature. Even for fully charged battery, the lifetime can be decreased because of its own properties of voltage decrease.
- Use caution when around other electronic devices with possible high frequency or electro-magnetic effects e.g. Audio, etc.  
Doing so will lead to the risk of product malfunctioning or a system error occurring.
- Avoid exposing product to direct sunlight. Do not use product in areas of high humidity. Doing so may cause low reliability and/or operational malfunction.

## Precautions Before Using Battery

**WARNING** These are safety precautions in order to prevent a dangerous accident.  
Please use the battery correctly and carefully observe the instructions.

- If the battery is taken apart by impact, applied heat, submersion, or hole-drilling, there is a risk of a dangerous explosion.  
Please keep away from children and animals.
- Leaving the battery in the vehicles under direct sunlight or any enclosed space with hot temperature can deform or break down the battery.
- Please do not make any improper contact on battery contact pin with necklaces, coins or any electric conductors.  
Do not give any impact by sharp object. There is a risk of explosion.
- Please use only the designated battery for the device. If the original battery is not used, the life of the device may decrease and there is a risk of explosion. (In this case you cannot receive the free repair service)
- The warranty for battery is for 6 months.

## About the product

### 1. Warranty

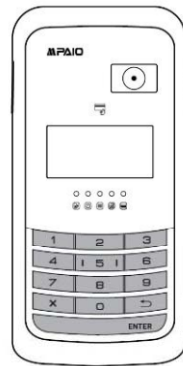
SAMILCTS guarantee our Mobile Payment product and its parts against defects, under proper use, for a standard period of 1 year from the original date of purchasing.

### 2. Checking components

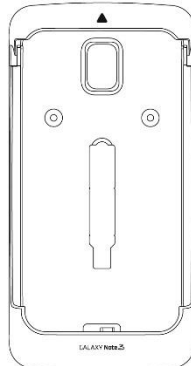
1. Please check your package and confirm its contents.
  2. The main unit (Brain & Sled), power cable, Bluetooth cover, bolts, driver, quick manual and battery are included in the package. If any items are missing or damaged, please contact us or your dealer for assistance.
- » All user manuals are available for download on our website: [www.mpaio.com](http://www.mpaio.com).



Main Unit  
(Brain + Sled)



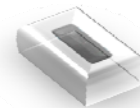
Brain



Sled



Power Cable



Quick Manual



Bluetooth cover



Battery

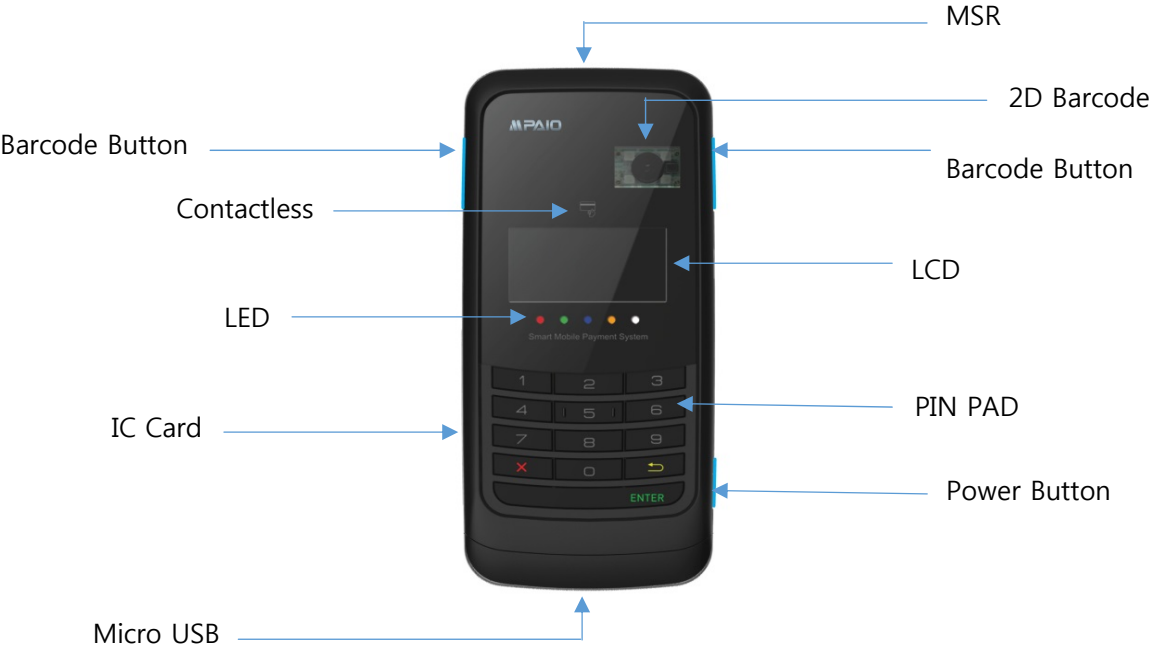


Bolt



Driver

3. Checking names of parts



#### 4. How to use with card



MSR



IC



Contactless

\*Before MSR and IC cards insert, make sure to clean on it. Otherwise, it may cause low reliability and/or operational malfunction.

LED



RED  
Battery Charging



BLUE  
Power on



GREEN  
Contactless Mode  
/Full Charged Battery



WHITE  
MSR/IC Card mode



YELLOW  
Barcode mode



## 5. How to use with barcode

Laser aimer is appeared from camera right of top on the brain when the button pressed on the "buy" screen.

For a good result, refer to following step and diagram.

1. Move the aiming position to the center of the barcode.
2. Keep aiming position to the center of the barcode until getting beep.
3. If the result is good, a beep will be sounded.
4. If the result isn't good, a beep will not be sounded.

※If lazer aimer disappear, press "scan" button on the brain. Then lazer aimer will be appeared again.



## 6. How to combine Brain & Sled



1) Put Brain in the line with the Sled rail.



2) Fix Brain to Sled with bolt using driver.



3) Completed

As shown in the above, cross the back bottom of Brain and the front top of Sled.

Disassemble is the reverse order of combination.

## 7. How to combine MAPIO & Galaxy



1. Open the cover

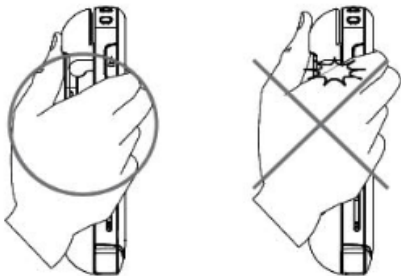


2. Insert Galaxy phone into the cover to fit inside the rail



3. Close the cover

**WARNING: Please pay attention to your fingers when cover closed.**



## 8. How to charge a battery

As see in the below picture, connect the adapter with the power cable to charge the power.



## 9. Product Information

As shown in the below, the product information is provided by shortcut key.



- "5": Bluetooth Address, Serial No & Firmware Version
- "X": go to the Main Menu.

## 11. Technical Specifications (MPAIO Brain)

Feature		Parameters	
MCU		Secure MCU 192 MHz	
Memory	Flash	512 Mbyte	
	SDRAM	128 Mbyte	
LCD Screen	Screen Size	2.3"	
	Pixel	128 X 64 DOT	
	Characters	8 Line, 16 Characters (each line)	
Card readers	Magstripe Reader	ISO7811, JIS II mode, 3 Track encrypted Head	
	Smart Card Reader	ISO7816, EMV4.3, 1 Slost	
	Contactless Reader	13.56MHz, ISO/IEC 14443 A/B Type, Felica	
Socket	SAM	ISO7816, 6Pin	
Pin Pad	KEYS	10 numeric & 3 functional keys	
	Method	Physical	
Buzzer		Yes	
LED		5ea	Blue, Red, Yellow, Green, White
Barcode Reader		2D barcode	PDF-417, microPDF-417, QR, Data Matrix, AZTEC, MAXI Code, UPC, ITF, STF, Matrix 2of5, IATA 2of5, Code39, Code11, MSI, Code93, Code128, GS128, Codabar, Telepen, GS1 DataBar.
Connectivity	Wireless communication	Bluetooth 4.0 (BLE)	
	Teminal connectivity	micro USB 11pins	USB full speed
Battery		Li-ion Battery, 3.8V, 1,900mAh	
Dimensions		Appox. 156.4(L) x 22.85(H) x 76(W)mm	only Brain
Weight		>318g with Barcode >310g without Barcode	only Brain
Battery Life		TBD	
Environment		-10°C / 0% ~ 60°C / 90%	
Certification		KCC, FCC/IC, CE, PCI-PTS(V3.1), EMV L1, L2(V4.3)	

## Q & A

**Q** Water went into my device. What do I do?

**A** First, remove the battery from the device and completely dry them in a dry place. After drying for a good period of time, try to turn it on. If it still does not turn on, the main-board or other parts needs to be replaced. Please contact to your service center.

**Q** The device won't turn on.

**A** The program may be damaged. Please try resetting your device. If it still doesn't work, Please contact the service center.

**Q** The device won't charge.

**A** A Make sure the power cable and your device have been properly connected. Try to clean the charging terminals. If they still do not work, your battery life might be finished or it may be a broken battery. (The battery warranty lasts for 6 months)

**Q** Displayed "Key Load Error" on the LCD.

**A** If MSR used without key registration, "Key Load Error" is appeared on the LCD. Please register a key before MSR use.

**Q** Displayed "Key Load Error" on the LCD.

**A** If MSR used without key registration, "Key Load Error" is appeared on the LCD. Please register a key before MSR use.

**Q** Displayed "EMV Read Error" on the LCD.

**A** If IC card socket is defective, " EMV Read Error " is appeared on the LCD. The EMV socket must be replaced. Please contact the service center.

**Q** Displayed “MAG Module Error” on the LCD.

**A** If MSR connection is unstable or MSR Module is defective, “MAG Module Error ” is appeared on the LCD. The part must be replaced. Please contact the service center.

**Q** Displayed “Secure Detect” on the LCD.

**A** If the device get shock, the Secure Detect" appeared on the LED. the part must be replaced. Please contact the service center.

**Q** Displayed “Please charge” on the LCD.

**A** If the battery us low, “Please charge “is appeared on the LCD. Please charge the battery. Please contact the service center.

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Tel: +82 70 7094 9050    Fax: +82 31 720 5166    E-mail: [sales@31cts.com](mailto:sales@31cts.com)

※ Even though it has been tried as above but the device still does not work, please contact to the service center.

※ After the 1 year warranty the repair service will be charged.



## **FCC Information to User**

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 instructions, may cause harmful interference to radio communications. 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 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.

## **Caution**

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC Compliance Information :** This device complies with Part 15 of the 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

## **IMPORTANT NOTE:**

### **FCC RF Radiation Exposure Statement:**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.