

# supoin



## Mobile Intelligent Terminal Instruction Manual V1.0 Version Win CE Operation Manual

S53, SHT30, SK9030, S3, X-3090, X-3090A, S50, SHT32,  
X5, X5H, X5A, X5AH, X6, X6A, X6H, X6AH, X7, X7A, S52, S56, R1

**Shenzhen Supoin Technology Corp.**

Addr : Room2401-2408,Block A, World Trade Square,  
No.9 Fuhong Rd, Futian District, Shenzhen, China

Tel : +0086-755-25828560 82178516 Fax : +0086-0755-82281509

[www.supoin.net](http://www.supoin.net)

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## Copyright Statement

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Hello!

Thanks for choosing our series products.

Before use, please read the user manual carefully to learn more about our products' features. The products are subject to upgrade from time to time, so please contact us for the latest version. This manual is for reference only.

## Chapter 1 Brief Introduction

### 1.1 Overview

series products are industrial grade handheld terminals independently researched, developed, designed and produced according to the characteristics of each industry, and feature ergonomic design, compact size, anti-shock and anti-fall design, long standby time and stable operation. Moreover, the Product series boasts IP65-rated robustness against adverse environments because it is waterproof, dustproof, shatter-resistant, electrostatic prevention and anti-high and low temperature.

### 1.2 Scope of Applications

Mainly used in the fields of shoes, clothes, channels, logistics, drug supervision and etc.

## 1.3 Technical Specifications

Product Model	
CPU	88AP310
Operating System	Windows Embedded CE 6.0
Memory	256MB ROM 256MB RAM
Display	3.5-inch QVGA (240x320)
1D code	Optional
2D code	Optional
<b>Bluetooth</b>	<b>BT V3.0(EDR+BR)</b>
Wifi	IEEE 802.11 b/g/n
WWAN	GSM/GPRS
Battery	3800 mAh polymer lithium batteries
Expansion Slot	Mini SD card, up to 32 GB, Micro SD slot
Vibration Motor	Built-in programmable vibration motor
Keypad	30-key
Programming Environment	Tool : Microsoft Visual Studio 2005/2008 ; Language : C++ / C# / VB.NET
Certification	CE, RoHS, IP65, ISO9001

## 1.4 Battery Life (hours)

Test Item	PXA310
Continuous 1D scan+sound	12.04
Continuous 1D scan +WI-FI (powermode=1) upload +sound	10
Continuous 1D scan +WI-FI (powermode=0) upload +sound	6.5
Continuous 1D scan +GPRS upload +sound	9.83
Continuous 1D scan +EVDO upload +sound	8.85
Continuous 1D scan +WCDMA upload +sound	7.1
Continuous 2D scan+sound	11.66
Continuous 2D scan +WI-FI (powermode=1) upload +sound	9.41
Continuous 2D scan +GPRS upload +sound	10.2
Continuous 2D scan +EVDO upload +sound	8.23
Continuous 2D scan +WCDMA upload +sound	10.13
Dormancy and standby (GPRS Off)	About 300
Dormancy and standby (GPRS On)	About 100

## Chapter 2 Appearance

### 2.1 Appearance view



## Chapter 3 Use Instructions

Then we will introduce the software function of Product series devices in detail, mainly on the use of PDA configuration tool.

### 3.1 PDA Desktop

The terminal will be turned on by pressing the power button for 3 to 5 seconds after putting in the battery; the following interface will be displayed:



Of all the three indicating lights in the top right corner, the one in the leftmost will light after turning on, the middle one will turn to red after plugging in power, and turn to green after the battery is filled. For example, the red marker box in the above picture displays battery level and signal strength. Battery level indicate: Normal above 30%; insufficient 10%-30%; low power less than 10%.

Note: you shall charge at once at low power, please turn off the terminal if you can't charge immediately, otherwise it will cause the battery can't be charged then.

Choose Start > Programs, and the following shortcut will appear: IE browser, Media Player, Microsoft WordPad, Windows Resource Manager, Command Prompt, Synchronous and Remote Desktop Connection.


## 3.2 Use Instructions for PDA Tools



### 3.2.1 Main Menu of PDA Device



### 3.2.2 Wi-Fi Setting

 Turn on/off the Wi-Fi module: Set whether the Wi-Fi module runs on startup of the terminal.

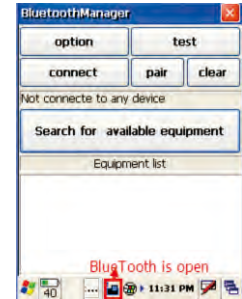
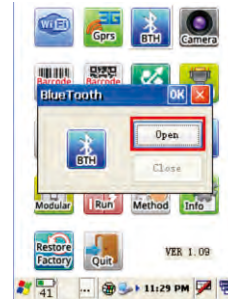
- A) An icon will appear in the taskbar after Wi-Fi access is enabled.
- B) If "Run on Startup" is selected, the Wi-Fi module will be loaded automatically in the boot process of your terminal.



### 3.2.3 3G and GPRS Test (Optional)

 AT instruction test is usually used in 3G or GPRS module dial test.





- A) Obtain current signal value
- B) If "Run on Startup" is selected, the current 3G or GPRS module will be started automatically in the boot process.(Note: Automatic dial-up access is unavailable.)



### 3.2.4 Bluetooth Setting



Turning On/Off Bluetooth

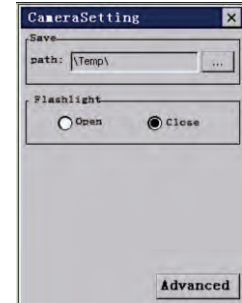
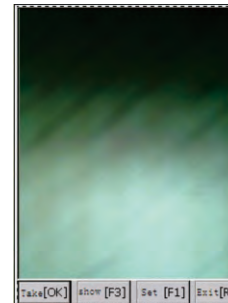
- Open or close the window of Bluetooth Manager
- The bluetooth icon  will appear in the taskbar after opening.
- Double click the icon in the taskbar ; the Bluetooth Manager window will be activated.
- Click the  in Bluetooth Manager window, the window will be minimized to the taskbar.
- Click "close bluetooth", quit Bluetooth Manager, the icon  in the taskbar will disappear.

### 3.2.5 Camera Setting(Optional)



Activate camera program

- "Take OK" : Focus and take pictures.
- "Show F3" : Preview the photos.
- "Set F1" : set the path of the photos; flashlight open/close (closed in default); brightness; resolution ratio and etc.
- "Exit R" : close the camera.



### 3.2.6 Barcode 1D Setting



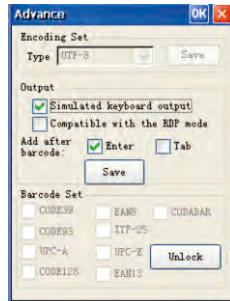
Open/close and various parameter setting of barcode 1D auto scanning tools

- A) "Open scan head" : open the autoscan function, input barcode in the focal position of other application program. After opening this function, this function will be automatically launched at each boot.
- B) "Advance options" : set the code system and output model of Barcode 1D.
- C) "The initialization of scan head" : restore factory setting of the scan head.

Note:

When you click "open the scan head", the auto scan function will remain scan when you exit the program, press the scan button, and the focus of the current input box will output barcode.

If you want to call API in the program to achieve the barcode output, you must "shut down the scan head", otherwise it will have a impact on the program barcode output.



### 3.2.7 Barcode 2D Setting



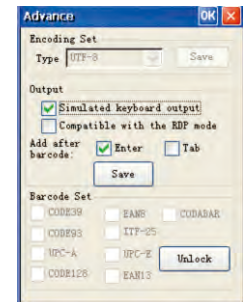
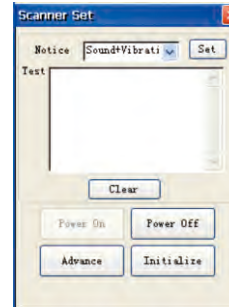
Open/close and various parameter setting of Barcode 2D auto scanning tools

- A) "Open scan head" : open the autoscan function, input barcode in the focal position of other application program. After opening this function, this function will be automatically launched at each boot.
- B) "Advance options" : set the code system and output model of barcode 2D.
- C) "The initialization of scan head" : restore factory setting of the scan head.

Note:

When you click "open the scan head", the auto scan function will remain scan when you exit the program, press the scan button, and the focus of the current input box will output barcode.

If you want to call API in the program to achieve the barcode output, you must "shut down the scan head", otherwise it will have a impact on the program barcode output.






### 3.2.8 USB Setting



Set data synchronization or USB disc loading (note: this item is only existed in 2416 plan device, remember not to connect with the USB line before setting, or the setting is invalid)

A)Synchronization: The PC shall install Microsoft ActiveSync, and the PC taskbar will appear  after connecting USB line, and then the data can be updated.

B)U Disc Mode

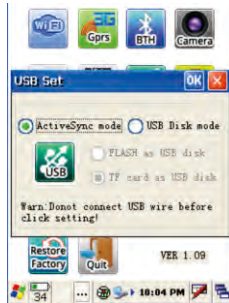
- 1Use FLASH as U disc: will be displayed as "local disc" in the PC.
- 2Use TF card as U disc: will be displayed as "movable disc" in the PC.

C)Operating Mode:

Step 1: Pull the USB line, and restart PDA.

Step 2: Set in the USB Set interface.

Step 3: Restart PDA.

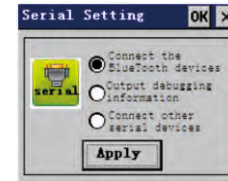


### 3.2.9 Serial Port Setting



Set the application mode of the serial, and it will come into force after restarting.(note: the devices of PXA310 plan has no this function)

- A) "Connect the BlueTooth devices" : connect buletooth printer.  
B) "Output debugging information" : output the debugging information of the application program to PC through serial.  
C) "Connect other serial devices" : use the customized serial tool wire to connect other serial devices.



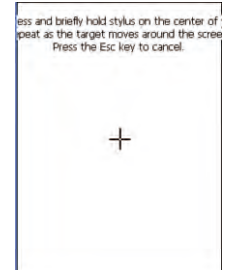
### 3.2.10 Screen Setting



Set the brightness and calibration of the screen.

A)Adjust the brightness through shift the scroll bar.

B)Press the center of "+", and click OK button to store the brightness after finishing the setting.

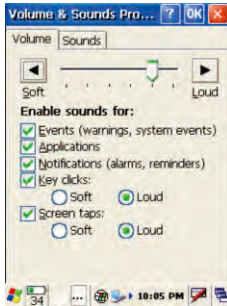


### 3.2.11 Sound Setting



Set the volume and sounds

- A) Adjust the volume through the shift the scroll bar.
- B) Set the sound plan of the system

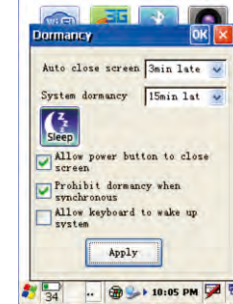


### 3.2.12 Dormancy Setting



Set dormancy and wake up parameter of the system

- A) "Auto close screen" time: the screen will close automatically when the system is in idle status, and the time interval reaches.
- B) "System dormancy" time: the terminal will enter into system dormancy when the system is in idle status, and the time interval reaches, at this point, the system is working in low power consumption, and most of the hardwares are in standby status.
- C) "Allow power button to close screen" : If the choice is selected, the screen will be closed by pressing the left upper button of the device.
- D) "Prohibit dormancy when synchronous" : If the choice is selected, the system will not enter into dormancy status when synchronizing data by plugging in USB wire.
- E) "Allow keyboard to wake up system" : if the choice is selected, any button can wake up the system when the system is in close status or dormancy, or only the power button in the upper left can wake up the system.

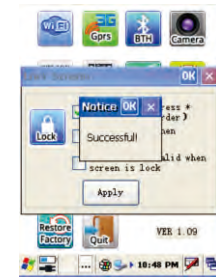
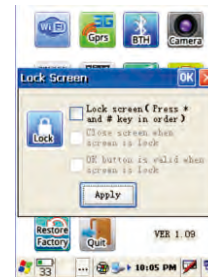


### 3.2.13 Lock Setting




Set relevant parameter when locking the screen

- A) "Lock screen" : if the choice is selected, the screen will be locked automatically if you press \* and # key in order, a picture of a lock will appear in the screen, and then the screen will be unlocked if you press \* and # key in order.
- B) "Close screen when screen is lock" : if the choice is selected, the screen will close automatically when locking.
- C) "OK button is valid when screen is lock" : if the choice is selected, OK button is valid when locking the screen, but other buttons are invalid.



### 3.2.14 Sound Setting

 Set on or off of each hardware modular in PDA

A) WI-FI: turn on or turn off WI-FI modular, WI-FI Manager icon  will appear in the taskbar after turning on


B) GSM/3G Power: Turn on or turn off GSM Modular or 3G Modular.

C) Barcode 1D: turn on or turn off the autoscan program of barcode 1D scan head.

D) Barcode 2D: turn on or turn off the autoscan program of barcode 2D scan head.



### 3.2.15 Autorun Setting

 Set the operating programs and shortcuts of autorun.

A) "Desktop shortcut" : set up shortcut in the desktop.

B) "Start menu shortcut" : set up shortcut in the start menu.

C) "Delete shortcut" : all shortcuts setted in A and B.

D) "Publish autorun app" : publish application program, which will autorun in the boot after successful setting.

E) "Cancel autorun app" : cancel autorun software published in D.



### 3.2.16 Input Method Setting

 Set " #" to change the input method

A) "Soft keyboard" : allow " #" key to activate the input panel of soft keyboard

B) "Keyboard input letter" : allow " #" to activate keyboard to input letter.

C) "Pinyin input method" : allow " #" to activate Pinyin input method.

D) "Hand-writing input method" : allow " #" to activate Chinese hand-writing input method.



### 3.2.17 Setting Information



Display all information of the current device.



### 3.2.18 Restore Factory



Restore Factory setting (note: all data in the device will be emptied, please operate carefully, this function is used under the circumstance of abnormal condition in the customers device, and normal method can't solve.)

- A) For device of S3C 2146 plan, can restore by putting password in the interface.
- B) For device of PXA310 plan, according to the indication of the interface, press F3 in the boot, when "Recover system?" appears in the top left corner, press [OK] key at once, and then the system will appear "Please wait.....", which means in the process of restore factory, and the system will be restored successfully within about 3 minutes, then please carry on touch calibration according to the indications.

## Chapter 4 Precautions and Troubleshooting

### 4.1 Precautions

#### 4.1.1 To ensure that Product does not fail, follow the following precautions during use of Product:

Put the Product and its components and accessories in the places where children cannot reach.

Keep the Product dry. Rain, moisture and liquid contain acidic materials and will corrode the circuit board.

Do not store or use the Product in dusty or dirty places.

Do not store the Product in a place that is too hot. High temperature will shorten the service life of electronic components.

Do not store the Product in a place that is too cold. When the temperature inside the Product rises, moisture is generated inside the Product, which may damage the circuit board.

Do not try to disassemble the Product. Otherwise, the Product may be damaged.

Do not touch the screen surface of the Product by using a pen, a pencil or other sharp articles in case the screen may be scratched.

Do not throw, beat or violently collide the Product. Otherwise, the components of the Product may be damaged and the Product may be faulty.

Do not use strong chemical products or strong detergent to clean the Product. If the Product become dirty, clean the surface of the Product by using a soft cloth soaked with dilute glass detergent.

Please use the protective film to reduce wear as much as possible. The screen protective film can improve the availability and durability of the screen.

### 4.1.2 Pay attention to the following during use of the battery.

The area where the Product is charged must keep away from scraps, inflammables or chemical substances.

When you charge the battery of a mobile device, the temperature on the battery and charger must be in the range 0° C to 40°C.

Do not use incompatible batteries or chargers, which may cause fire, explosion, leakage or other hazards.

Do not disassemble, press, twist, pierce or cut the battery.

Do not make the battery short-circuited or contact the connecting terminal of the battery by using metal or other conductive objects.

Do not insert other materials into the battery, contact the battery with water or other liquid, or expose the battery in an open fire, explosive source or other sources of danger.

Do not put or store the battery in the environment where the temperature is too high.

Do not put the battery in a microwave oven or a drying machine.

Do not put the battery into a fire.

If the battery leaks, do not let the liquid stain your skin or eyes. Otherwise, wash your skin or eyes with lots of water and go to see the doctor immediately.

### 4.1.3 Cleaning

Shell

Clean the shell by using a cloth soaked with alcohol, including keys and space between keys.

Display

You can clean the display screen by using a cloth soaked with alcohol. Do not let the liquid gather around the screen. Otherwise, dry the screen by using a soft non-woven cloth in case strip marks are left on the screen.

Scan lens

Clean the scan lens regularly by using lens paper or other articles suitable for cleaning optical materials.

### 4.2 Troubleshooting

Fault	Cause	Solution
After the power key is pressed, the Product is not powered on.	The battery volume is too low or the battery is not charged.	Charge the Product or replace the battery.
	The battery is incorrectly installed.	Correctly install the battery
	The system breaks down.	Restore factory settings.
Battery charging fails.	The battery fails.	Replace the battery.
	The temperature of the battery is too high or low.	Put the battery in normal temperature.
During data communication, data is not transmitted or transmitted data is incomplete.	The cable configuration is incorrect.	Consult the system administrator.
	The communications software is incorrectly installed or configured.	Install or reinstall the ActiveSync software to update the driver.
The relevant function is not activated after a user clicks a button or icon.	The system does not respond.	Restart the system.
No sound can be heard.	The volume is too low or is disabled.	Adjust the volume.
The Product is closed.	The Product is in the inactive state.	After being inactive for a period of time, the Product is closed.
	The battery is used up.	Replace the battery.
The Product responds at a low speed.	Too many files are stored in the Product.	Remove unused memos and records. If necessary, save the records on the host or increase the storage capacity by using an SD card.
	Too many applications are installed on the Product.	Remove applications installed on the Product.

# Max SAR Summation

The Product does not decode barcodes.	The scan application is not loaded.	Load iScan in the Product.
	Reading a barcode fails.	Check that the barcode is defective.
	The battery volume is low.	If the scanner stops sending out laser beam after you turn on the switch, check the battery volume.
Charging fails.	The cable is in poorcontact.	Replace the cable.
The synchronization software cannot be connected.	The cable is in poor contact.	Replace the cable.
An AP cannot be connected.	"Authentication fails" is displayed.	The password of the WLAN device is incorrect.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. Any changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment.

NOTE: 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 or 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.

## SAR Statement

This Product meets the government's requirements for exposure to radio waves.

The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

FCC RF Exposure Information and Statement the Extremity SAR limit of USA

(FCC) is 4.0 W / kg averaged over Ten gram of tissue. Device S53(FCC ID: 2AKDY-S53)

has been tested against this SAR limit. SAR information on this can be viewed on-line at <http://www.fcc.gov/oet/ea/fccid/>. Please use the device FCC ID number for search. This device was tested for typical

operations 0mm from the Extremity. The Max SAR Summation:1.692 W/kg To maintain compliance with FCC RF exposure requirements, 0mm separation distance should . maintained to the user's bodies