



Mobile Intelligent Terminal
Manual Instruction V2.0 Version
WinCE Operation Manual

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Hello,
Thank you for your concern and support to S50 series products. Before using the series products, you are highly recommended to read the User Manual carefully so as to give full play to product functions. Equipment and system may upgrade from time to time, so the latest version is the final basis. This manual is for reference only.

Chapter 1 Introduction to S50 Series Products

1.1 Overview

S50 product is an industrial hand-held terminal independently researched and developed, designed and produced according to the industrial characteristics. Its appearance is adopt the ergonomic design, with the light, flexible, anti-vibration and anti-dropping features, as well as long standby time and stable operating system. S50 product is in accordance with IP65 industrial standards for water-proofing, dust-proofing, anti-dropping, anti-static and high & low temperature resistance design.

1.2 Applicable industries

It is mainly applicable for warehouse, channel, logistics, drug supervision, retail industry and other fields.

1.3 Product parameters

Performance parameters

Operating system	Microsoft Windows CE 6.0
Processor	806MHz/1GHz
Memory	256M RAM +256M ROM/512M RAM +512M ROM

Physical parameters

Display screen	3.5" 240×320 TFT color touch screen
Dimensions	L 179.5 x W 78.18 x T 31.02mm
Weight	370g (including standard battery)
battery	Unloadable 3.7V 3800mAH, 10 hours, Above 200 hours standby
Camera	5 mega pixels
Keyboard	26 regular keys, 1 power key, 1 reset key, 2 sides keys
Interface	1 Mini USB 2.0, 1 MicroSD/TF slot, 1 SIM slot (optional), 1 charging interface, 3.5mm stereo headphone jack.
Power Adapter	Input: AC 100-220V 50/60HZ; Output: DC 2.5A
Input method	English, handwriting input
Audio (optional)	Loudspeaker, headphones
Way of notification	Speaker, indicator light and vibration

Environmental parameters

Temperature	-20°C ~ 50°C (Working) -30°C ~ 60°C (Storage)
Electrostatic	±15kV Air , ±8kV Contact
Relative humidity	5% ~ 95%RH
Protection grade	IP65
Anti-dropping height	Bear the impact of dropping to smooth cement ground from the height of 2.5m for many times
Anti-rolling strength	Almost 1000 times for rolling within the scope of 1m (impact force)

Data communication parameters

WIFI	IEEE 802.11 a/b/g/n
Bluetooth	Bluetooth 2.1
WWAN	GPRS/EVDO/TD-SCDMA/WCDMA
Decoding ability	1D laser /2D image scan engine
	scanning precision: ≥ 3mil
	Depth of field: 3cm-70cm (Depends on barcode density and type)
	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.; PDF417, MicroPDF417, Composite, RSS, TLC-39, Data matrix, QR code, Micro QR code, Aztec, Postal Codes: US PostNet; US Planet; UK Postal, Japan Postal, Dutch Postal (KIX), etc.

Chapter 2 Product Appearance

2.1 Appearance view



Front view



Side view



Back view



Top view

Chapter 3 PDA Configuration Instructions

Introduce the software function of S50 series devices in detail.

3.1 PDA Desktop

The terminal will be turned on by press the power button for 3 to 5 seconds, the following interface will be displayed.



Three indicating lights in the top right corner, the one in the leftmost will light after turn on the device, the middle one will turn to red when charging the device, and turn to green after the battery is fully charged. 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: We should charge at once at low power, please turn off the terminal if you can't charge it immediately.

3.2 PDA Tools and main menu of PDA Tools



3.3 WIFI



Turn on/off the Wi-Fi module: Enable whether Wi-Fi module turn on when device power on.

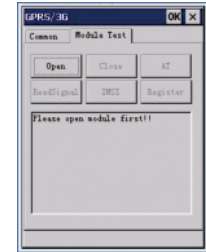
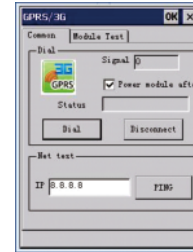
- A) An icon will appear in the taskbar after turn on Wi-Fi module.
- B) If 'Auto Run' is selected, the Wi-Fi module will be turn on automatically when device power on.



3.4 3G and GPRS Test



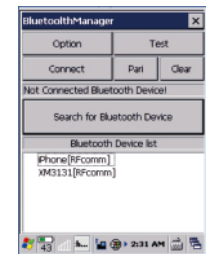
AT instruction test is usually used in 3G or GPRS module dial test.
 A) Obtain current signal value.
 B) If the option 'Power module after power on device' is selected, the current 3G or GPRS module will be turn on automatically in the boot process. (Note: Don't dial-up and connect to Internet automatically.)



3.5 Bluetooth



- A) Open or close Bluetooth.
- B) The bluetooth icon will appear in the taskbar after turn on bluetooth.
- C) Double click the icon in the taskbar, the Bluetooth configuration interface will be activated.
- D) Click the icon in Bluetooth configuration interface, the window will be minimized to taskbar.
- E) Click 'close' turn off Bluetooth, the icon in the taskbar will disappear.

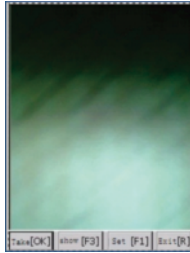


3.6 Camera



Turn on/off camera.

- A) 'Photo OK' : Focus and take pictures.
- B) 'View F3' : Preview the photos.
- C) 'Set F1' : Set the path to save photos, open/close flashlight (closed in default), brightness and resolution ratio, etc.
- D) 'Exit R' : Close the camera.



3.7 1D Scan Engine

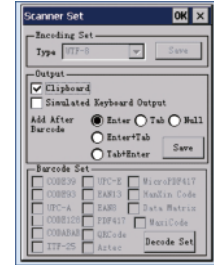
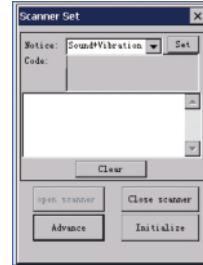


Open/close and set various parameter of 1D scan engine.

- A) 'Open Scanner' : Turn on scan engine.
- B) 'Advance' : Set the code type and method of outputting barcode data information.
- C) 'Initialization' : Restore factory setting of the scan engine.

Note: When you click 'Open Scanner', and choose option 'Clipboard', the barcode data information will output in where the cursor displaying when you exit the program.

If we want to call API in the program to output barcode data information, we have to click icon 'Close Scanner' to turn off scan engine, other wise it will have an impact on the program output barcode data information.



3.8 2D Scan Engine

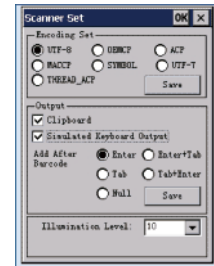


Open/close and set various parameter of 2D scan engine.

- A) 'Open Scanner' : Turn on scan engine.
- B) 'Advance', the default password is 87651234: Set the code type and method of output 2D barcode data information

Note: When you click 'Open Scanner', and choose option 'Clipboard', the barcode data information will output in where the cursor displaying when you exit the program.


If we want to call API in the program to output barcode data information, we have to click icon 'Close Scanner' to turn off scan engine, other wise it will have an impact on the program output barcode data information.



3.9 USB



Set data synchronization or USB disc loading.

- A) Synchronization: Install software Microsoft ActiveSync in the PC, and icon  will appear in PC taskbar after the device connect with PC via USB cable, and then the data can be updated.
- B) USB disk mode : TF card as USB disk.
- C) Configuration method:
- Step 1: Disconnect USB cable, and reboot PDA.
- Step 2: Enter the USB configuration interface, choose relevant mode.
- Step 3: Reboot PDA.



3.10 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 icon 'OK' to save the brightness configuration after finish the setting.

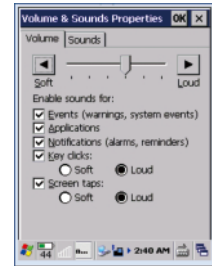


3.11 Sound



Set the volume and sounds.

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

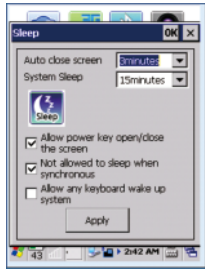


3.12 Sleep Setting



Set sleep and wake up parameter of the system.

- A) 'Auto close screen' : The screen will close automatically when the system is in idle status, and the time interval reaches.
- B) 'System sleep' : The device will enter into system sleep 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 hardware are in standby status.
- C) 'Allow power key open/ close the screen' : If this choice is selected, the screen will be closed/opened by pressing the power button of the device.
- D) 'Not allowed to sleep when synchronous' : If this choice is selected, the system will not enter into sleep status when synchronizing data by plugging in USB cable.
- E) 'Allow any 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 can wake up the system.

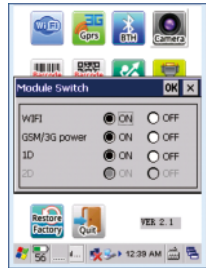


3.13 Modular Setting



Turn on/off of each hardware modular in PDA.

- A) WIFI: Turn on /off WIFI modular, WIFI Manager icon will appear in the taskbar after turn on.
- B) GSM/3G : Turn on /off GSM Modular or 3G Modular.
- C) 1D scan engine: Turn on /off 1D scan engine.
- D) 2D scan engine: Turn on /off 2D scan engine.

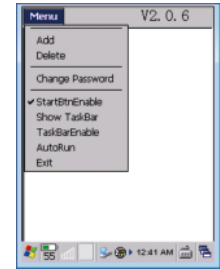
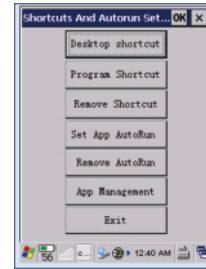


3.14 Auto Run



Set the application programs and shortcuts of Auto Run.

- A) 'Desktop shortcut' : Set up shortcut in the desktop.
- B) 'Program shortcut' : Set up shortcut in the main menu.
- C) 'Remove shortcut' : Remove all shortcuts set in A and B.
- D) 'Set App Auto Run' : Set application program auto run, which will run automatically after device power on.
- E) 'Remove Auto Run' : Cancel auto run software set in D.
- F) 'App Management' : The administrator set related application program rights to users.



App Management: The default password is 87651234.

- A) 'Add' : Add application program to the option 'App management' .
- B) 'Delete' : Delete application program to the option 'App management' .
- C) 'Change Password' : Change the password for the App Management.
- D) 'Show TaskBar' : Show or hide TaskBar.
- E) 'Auto Run' :Set whether turn on the App Management when power on the device.
- F) 'Exit' : Exit App Management configuration interface.

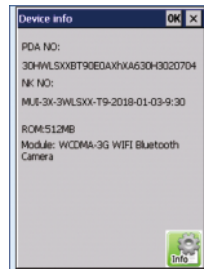
3.15 Input Method



3.16 System Information



Display all information of the current device.



3.17 Restore Factory Default Setting



Restore Factory default setting (Note: All data in the device will be deleted, please operate carefully, this function is used under the circumstance of abnormal condition in the device, and problem can't be solved in normal method)

The default password for Restore Factory Setting is 87651234.

Chapter 4 Troubleshooting

4.1 How to set WIFI Network

Step 1: Turn on WIFI module:

- 1) Click icon



Figure 4-1

Step 2: Network configuration

- 1) Click icon
- 2) Choose option
- 3) Obtain IP address via DHCP or specify an IP address.
- 4) Click icon 'OK' to save configuration.

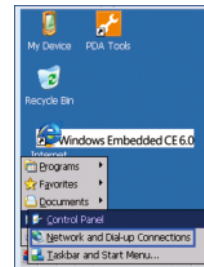


Figure 4-2

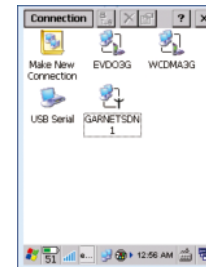


Figure 4-3

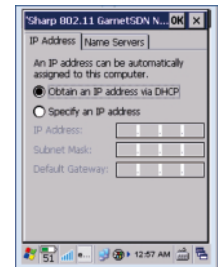



Figure 4-4

Step 3: Connect WIFI:

- 1) Double click the icon  in the task bar.
- 2) Choose option 'Wireless information', as figure 4-5, choose a wireless Network.
- 3) Input password as figure 4-6, click icon 'OK'.
- 4) Check the IP address after connect to the wireless network successfully as figure 4-7.

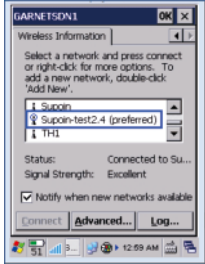


Figure4-5

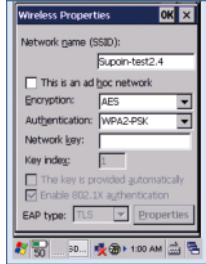


Figure4-6

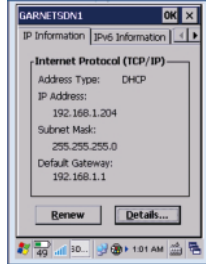




Figure4-7

4.2 How to connect with the Bluetooth printer

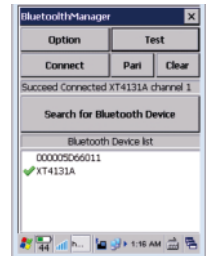
Step 1: Turn on Bluetooth printer and let it stay enable pair status

Step 2: Connect to Bluetooth printer

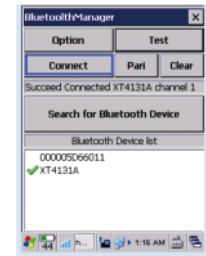
- 1) Turn on PDA Bluetooth module.
- 2) Click icon  to search Bluetooth device.
- 3) Click icon  to connect with relevant Bluetooth device.
- 4) Input password which displayed in the printer screen.



Turn on Bluetooth Module



Bluetooth Configuration Interface

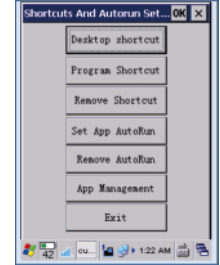


Connect to Printer

4.3 How to Set Shortcuts and Auto Run



• **Shortcuts:**

- 1) Click icon  ➔ 
- 2) Click icon  .
- 3) Choose related application program and finish relevant configuration.



• **Auto Run:**

There are three methods to set Auto Run :

1. Put the application program in the folder \Storage Card\AUTORUN\, and name it as APP.EXE;
2. Click icon  , Choose related application program and finish relevant configuration, then reboot the device. Click icon  to remove all Auto Run.
3. Set Auto Run via API, please refer to SDK.

4.4 How to Turn on/off 1D Scan Engine

• **Turn on 1D Scan Engine**

Click icon  ➔  ➔ 

• **Turn off 1D Scan Engine**

Click icon  ➔  ➔ 

4.5 How to Turn on/off 2D Scan Engine

• **Turn on 2D Scan Engine**

Click icon  ➔  ➔ 

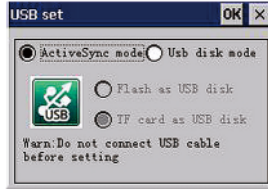
• **Turn off 2D Scan Engine**

Click icon  ➔  ➔ 


4.6 Set up ActiveSync Mode USB Disk Mode



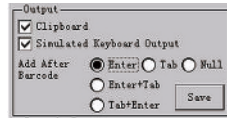
Note: Please disconnect the device with PC before you do following configuration.



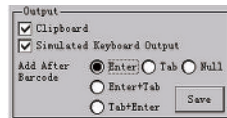
1. Choose USB Disk Mode.
2. We could find the Disk in the 'My Computer', then can send and receive data from PC.

ActiveSync Mode: We need to install software Microsoft ActiveSync in PC, connect to PC via USB cable, then we will find the icon  in the PC taskbar.

4.7 How to send 1D barcode data information with function Remote Desktop Connection to PC



4.8 How to send 2D barcode data information with function Remote Desktop Connection to PC



Chapter 5 Precautions and Maintenance

Please carefully use your device with the excellent design and technology. The following suggestions can help you use the warranty service effectively .

1. Please use the device according to this Manual, rather than trying to adopt other methods.
2. Keep the device dry, to prevent the circuit board from corrosion, causing the failure on power-on and other problems due to put the device in humid place for a long time
3. Keep the device clean and do not store it on the dust or dirty place for a long time. Thus, it may cause the failure of terminal on power-on or other problems.
4. Do not put the device on the overheating or over-cooling place for a long time
5. Do not forcefully knock or drop the device
6. Do not disassemble the device casually.

The correct usage method and maintenance of equipment can help you better make use of product performance. Among the problems reflected by many clients, most of them are caused due to the improper operation or inattention of maintenance. In case of any abnormal operation, it is suggest to read this Manual carefully or contact R&D personnel.