STM-7100™ User Guide

Shinheung Precision Co.,Ltd.

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User Guide& Copyright

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This User Guide is basically available for those who are familiar with Windows OS. You can refer to your PC manual or User guide for further information on PC operation.

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Caution

1). Fully be aware of User Guide and Safety directions before use your product.

2). Only use included or recommended accessories. Shinheung Precision Company is not responsible for using not authorized accessories.

3). Stay away your eyes from Bar-code reader.

4). Turn off your terminal before removing the battery.

5). Do not attempt to disassemble or modify your product. It can cause fire, injury, electric shock and other damages to you and your product.

6). Do not use your product in an area where a potentially explosive atmosphere exits.

7). Do not use when it storms or lightning.

8). Do not use in the pool, bathroom or where are wet. And do not deal with it with wet hands not to be get electric shock.

9). Do not leave your product in hot or cold places, such as in a car. Direct rays of the sun can also cause harmful influences on your product.

10). Use only designated battery charger. Other chargers may not be designed to the same safety and performance standards.

12). Do not use your product near medical equipment, when in, or around aircraft, and when you driving.

13). Do not expose your product to the security inspection in the airport.

14). Do not use it in high and humid temperature. It can harm your device.

15). Do not drop, throw or try to bend your product. It can cause serious damages. Use the leather case for protection.

16). Charge the battery fully before the initial use

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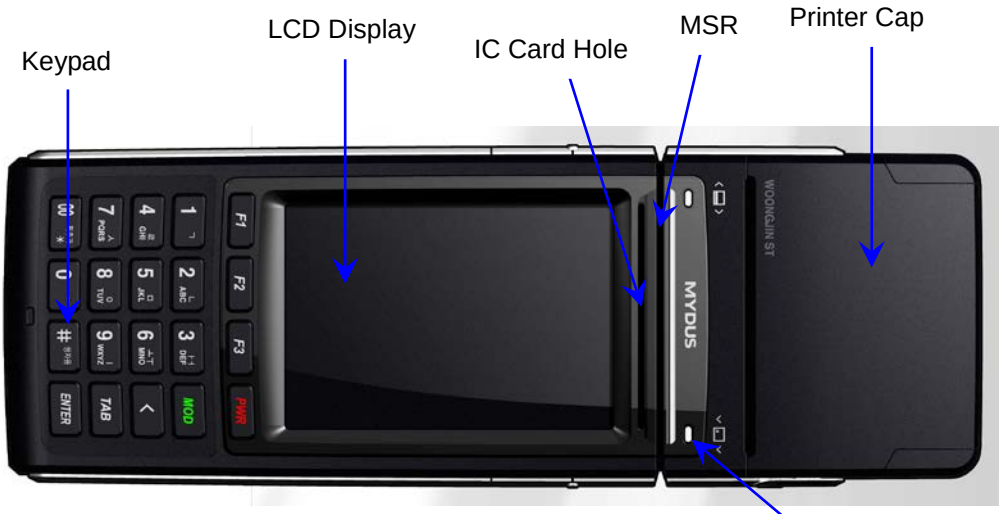
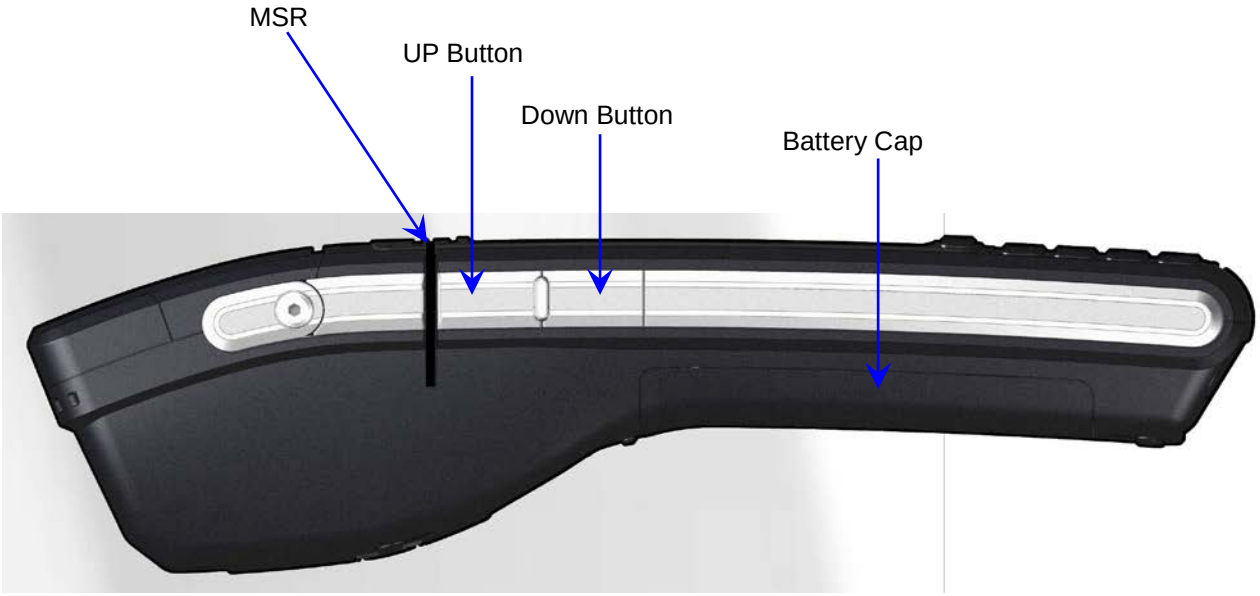
Introduction

This chapter explains you each parts of STM-7100.

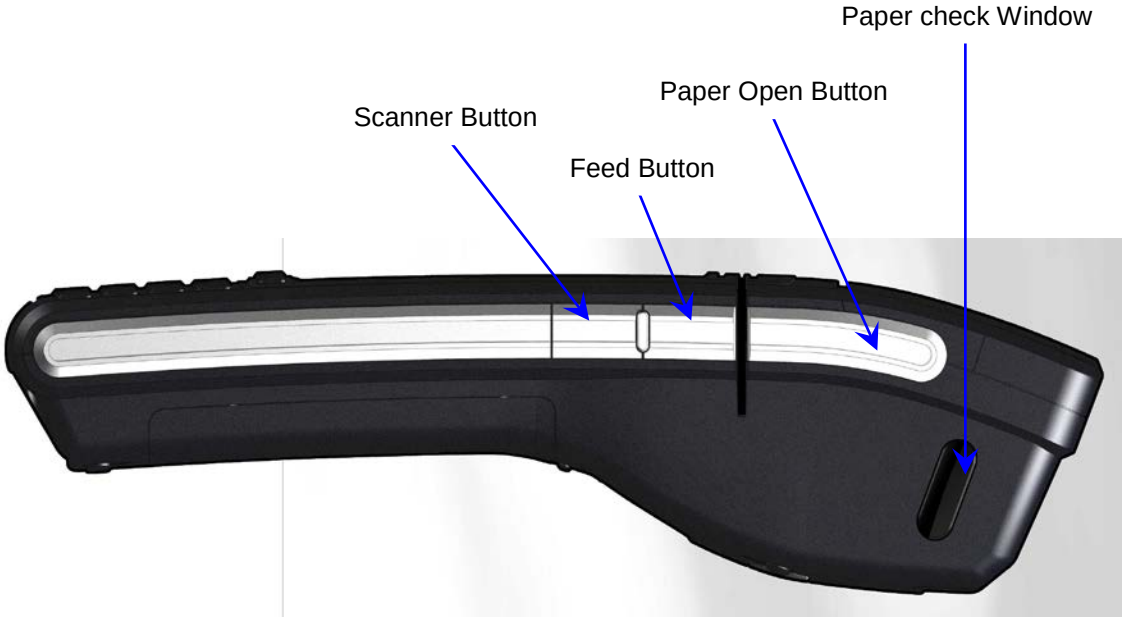
Parts Name

Please find each parts name of STM-7100™

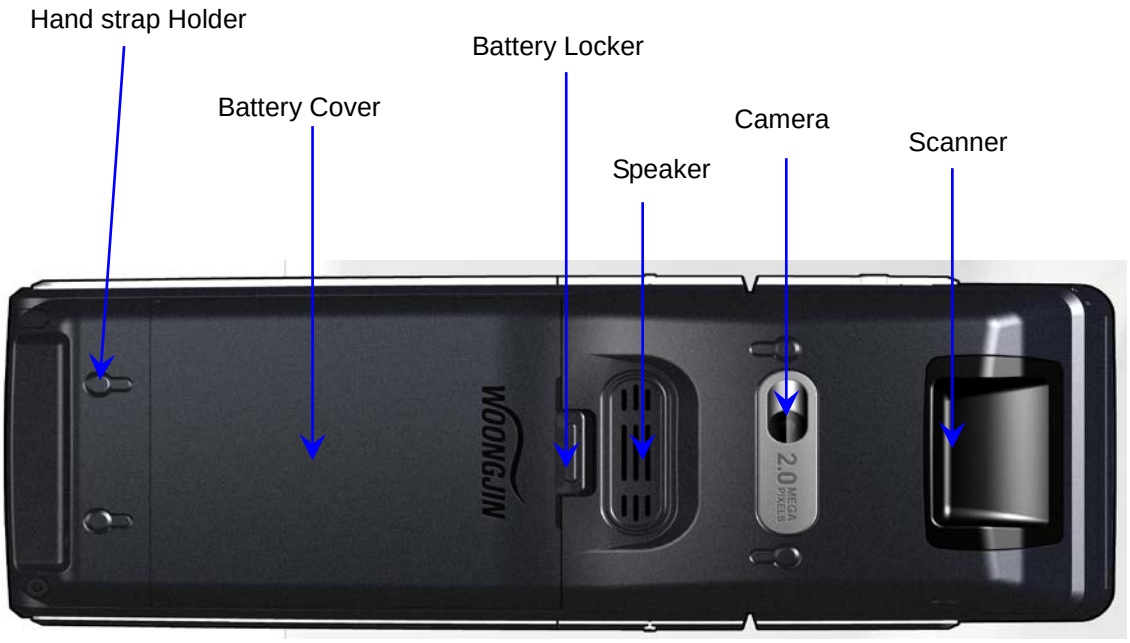




Left Side



Right Side



Bottom Side

Top side

Using Stylus

We provide a stylus for selecting items and entering information on the screen.

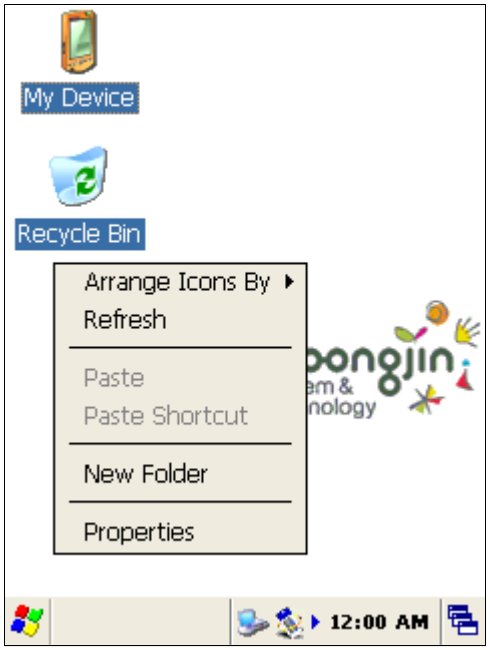
3 Functions you can use with Stylus

Tap	
Touch the screen once with the stylus for selecting or open items	
Drag	
To move the text or images on the screen, you can drag with the stylus. You can select several items also.	
Tap and hold	
To see the available actions for the items, you can tap and hold the item with stylus. Once you see the pop-up menu, you can select the action that you want.	

※ Notice: Please use the provided stylus. If you use other materials instead of the provided stylus, it may cause the serious damage to the unit.

▶ Pop-up Menu

You can select the available actions on the pop-up menu. For example, you can delete or copy the specific files on Note. To open the pop-up menu, hold the item 2~3 seconds. Once pop-up menu open, remove the stylus from the item and select the function. If you want to close the pop-up menu without selecting functions, you can tab out of the pop-up menu screen.



Reset

To reset the system, push the reset button with the stylus. Unsaved file will be lost and all of the

applications will be closed. It is same as the reset of Desktop PC. This is the Reset function.

Before HARD RESET, you should try RESET to recover your device. Do not try HARD RESET indiscreetly. HARD RESET does not delete files and documents in FileBox folder. Back up important data to FileBox folder. When FileBox folder is full, you can buy additional SD/MMC Cards for back-up.

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Starting

This chapter explains you basic functions of STM-7100.

When you turn on the unit, basic screen will be displayed.

Functions of Icons in the basic screen are explained as bellows.

You need to install the ActiveSync program for connecting this unit to the Computers.

Please refer the “Connect to the PC” pages for installation and how to use of ActiveSync.

▶ Screen Icon

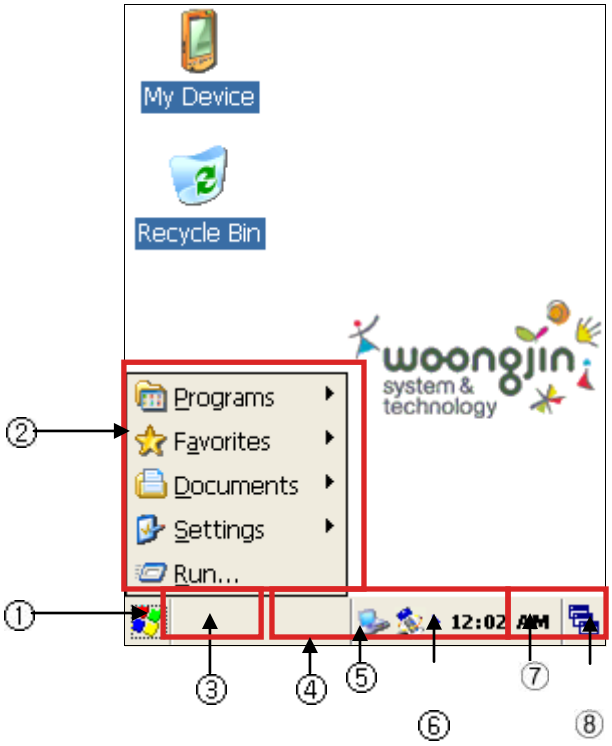
Like PC Windows, you can see the Task bar on the lower part of the main screen.

Icon	Description
	Battery is charging
	Battery is full (connect to the AC power)
	Remaining battery status
	Connecting to the PC (ActiveSync)
	Show/ Hide the input panel
	Wireless LAN status(On/Off)
	Wireless LAN Off
	Wireless LAN is On, but not connected to the AP
	Network connection status

▶ Access the Program

① Tab the “Start” button.

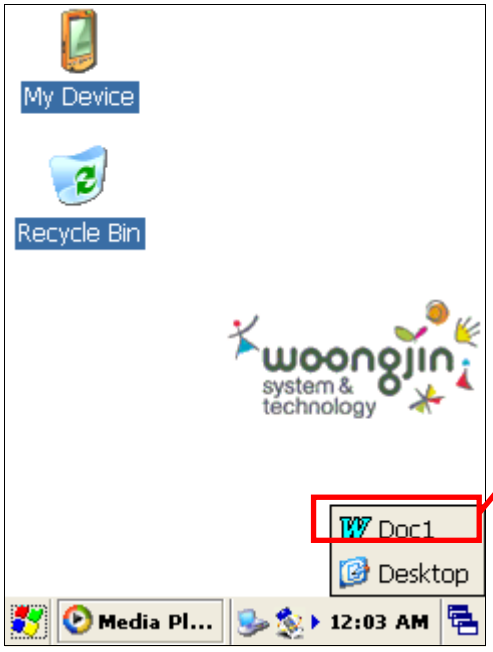
② You can access the program with selecting the program on “Start” menu or main screen. Also you can use the file explorer.

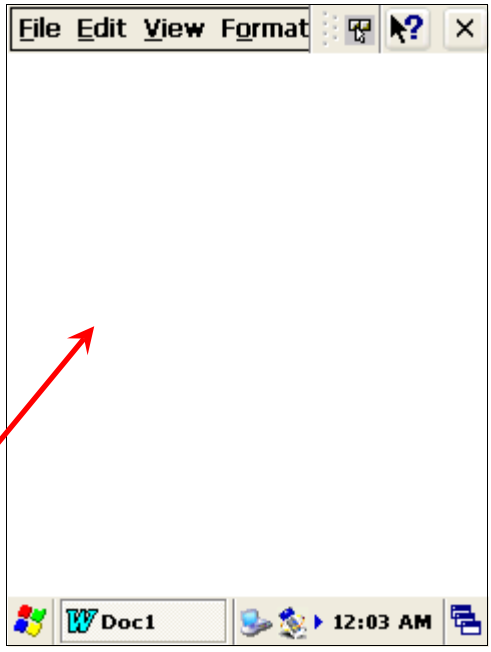


Number	Description
①	Start button
②	Start Menu
③	Current running program display
④	Connection to the PC (Active Sync)/ WLAN On/Off status
⑤	Hidden menu move
⑥	Time
⑦	keyboard
⑧	Switch the programs

▶ Switch the programs

If you want to swich programs that are running, you can use the “Switch the programs” menu. When you select the programs that you want to switch, the selected program comes to the front.



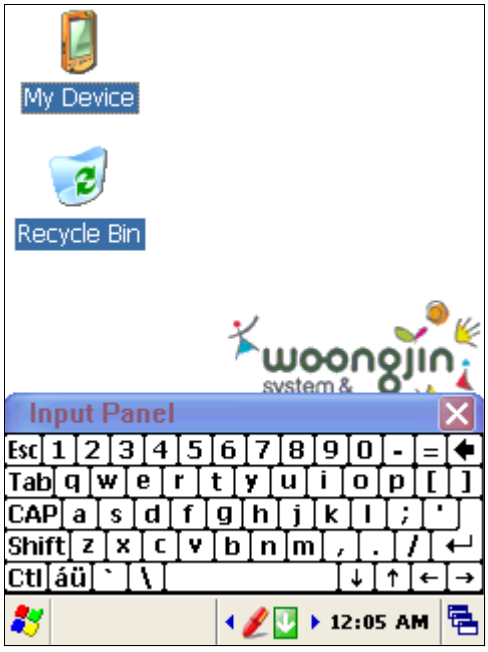


Select the icon that you want.

Selected program appear to the front side

▶ **Text input with Input panel**

To input the information on the certain application, you can use the input panel. You can input the text via Keyboard or writing. If you tab the arrow besides of input panel, you can choose the input way Keyboard input or writing input.



▷ Keyboard

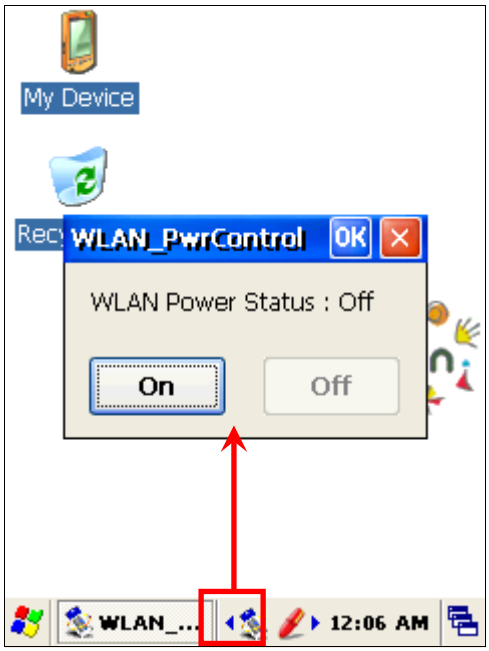
① Select the Keyboard after tab the arrow just besides of input panel.

② Input the Key with stylus on the Keyboard

▶ How to use WLAN

From the Start menu, run Internet Connector to connect with network through WLAN. Then you can use internet explorer to browse the internet.

You can turn On/Off the WLAN



WLAN ON

WLAN Off

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Connect to the PC

Microsoft ActiveSync Installation and establish the partnersip.

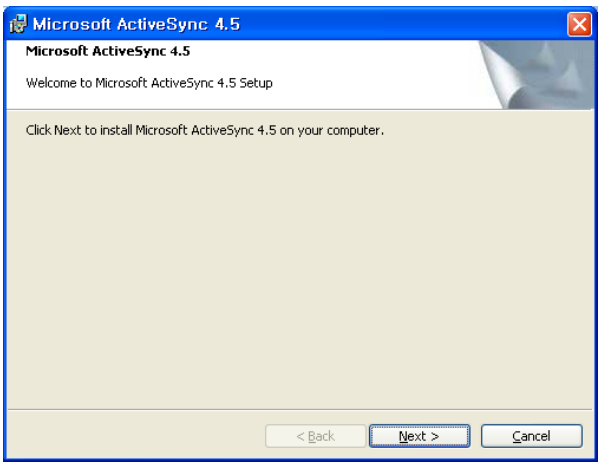
Using Microsoft ActiveSync, you can synchronize the information on your personal computer with information on your IMP-600. Synchronization compares the data on your PDA with your personal computer and updates both devices with the most recent information

To establish a partnership with a PC, you need to install Microsoft ActiveSync on your PC.

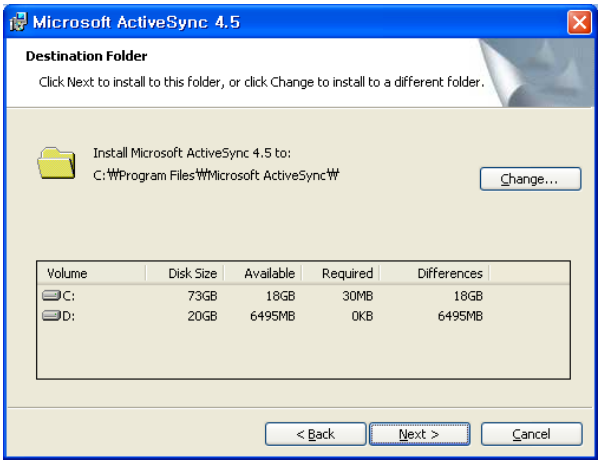
You can download ActiveSync at www.microsoft.com/korea

▶ **ActiveSync Installation.**

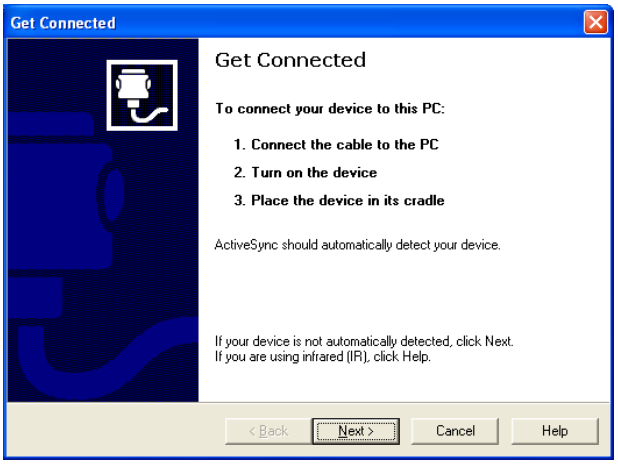
① Please click the Next button if you are ready to Set-up ActiveSync.



② You're prompted to select the installation folder for ActiveSync. Click **Next** to install ActiveSync to the default folder, or click **Change** to select a different destination for the program.



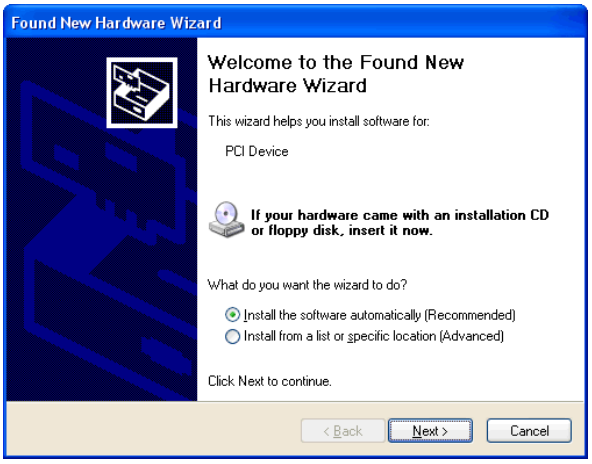
③ Click Next.



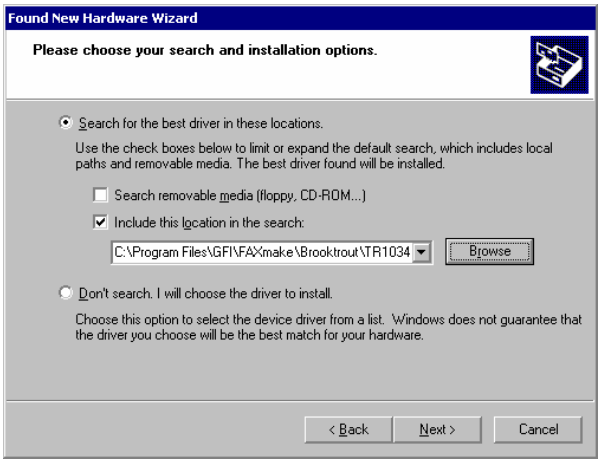
④ ActiveSync installation is finished. Please turn on and put the STM7100 unit to the cradle with USB cable connected to the PC. We will start the drive installation.

▶ Driver Installation

① After you connect this unit to the PC, Select List or specific location installation and click Next on the New H/W explorer Wizard.



② Select " Search for the best driver in these location" and check the "Include this location in the search" and click Next

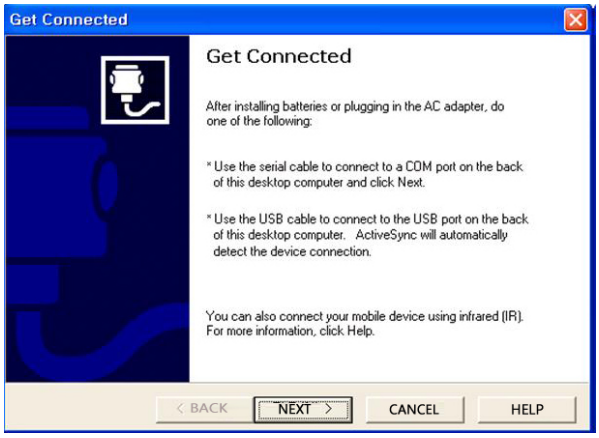


③ Click Next

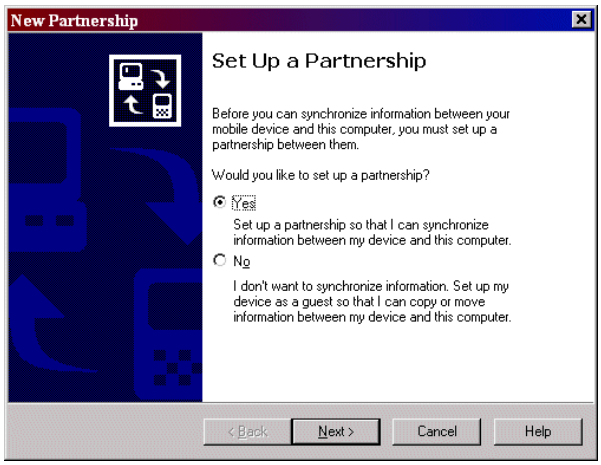
④ If you click Finish, driver installation will be finished. Once you finish installing drivers, it is ready to synchronize the unit and PC via ActivSync.

▶ **Synchrozing the Unit and PC with ActiveSync**

① When you run ActiveSync, you can see the below screen. Click Next.

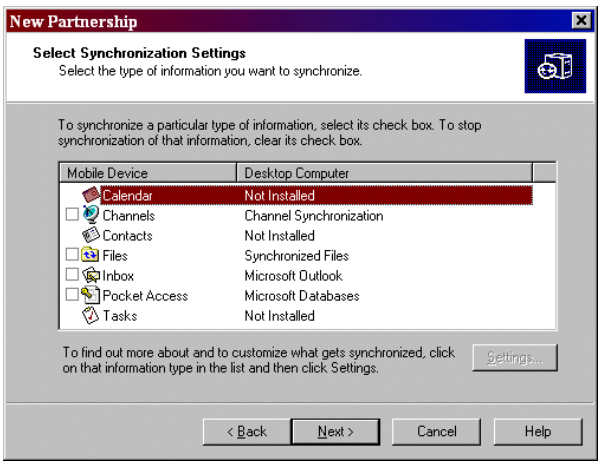


② Set up the partnership screen, select Yes and click Next.

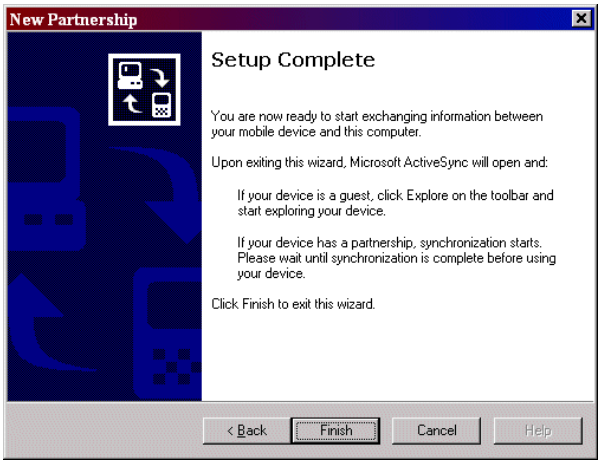


③ Next screen is for setting up how many PC you want to set the partnership. If you want one computer, please select Yes. If not, select No. and Click Next.

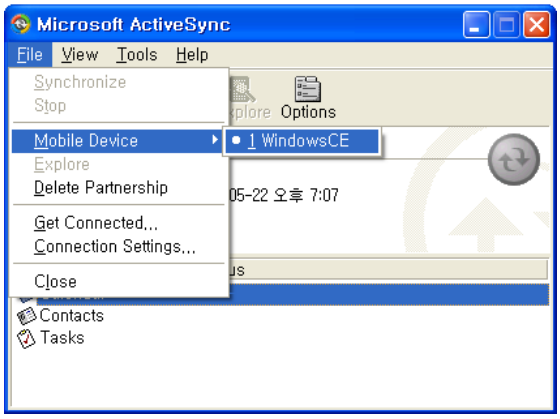
④ Select the applications that you wish to synchronize and click **Next**



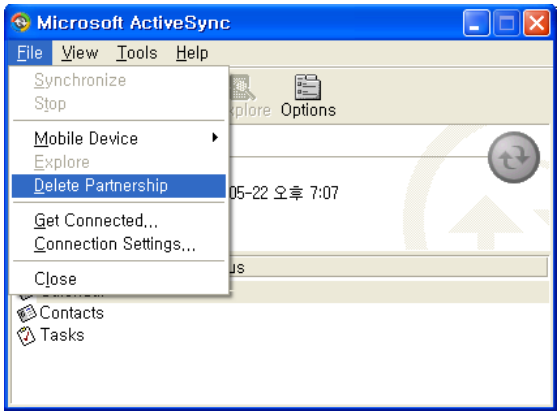
⑤ Establish a partnership is finished. Click **Finish.**



※ You need to change the partnership name when you hard reset the unit. In this case, Select the device name under File> Mobile Device and delete partnership name under File> Delete Partnership.



Select Device



Delete partnership

If you have problems when you install Activesync, Please check the connection setting under File menu on the PC ActiveSync screen..

▶ Synchronizing the data

Synchronizing means updating the latest information after compare the information between the unit and PC. For example, you can synchronize the data of Calendar, Contacts, Task on Outlook or Favorites of Explorer, Inbox and Notes with PC. To synchronize the Microsoft Outlook data, you need ActiveSync 4.5 version or later version.

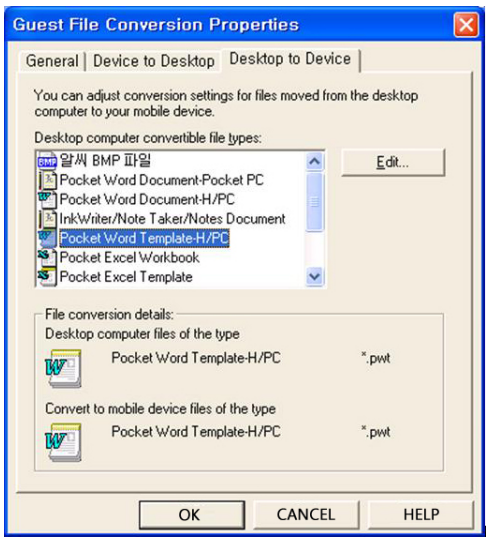
You can select the information that you want to synchronize and manage the volume of data via ActiveSync option.

▶ Copy, paste and convert the files

Select the target file that you want to copy, and click the Copy under Edit menu or pop-up menu with right mouse click. Click Explore button on the PC ActiveSync screen.

Choose the designated folder and paste the file or right click on the mouse. Copy the file is finished.

When you synchronize the data, some files are converted with right format. However, if you don't want to change the file format, you can select the file format clicking Option button on PC ActiveSync sreen.



1) Backup/ Restore files with ActiveSync

You can back up or restore files, Data base, PIMS information and programs on the RAM to the PC.

It can run automatically or manually.

▷ **Backup**

1) Connect the unit to the PC
2) If you select the Backup/Restore under Tool menu on the Activesync scree.
3) Select ‘Full Backup’ or ‘Incremental Backup.
4) Select the Backup now button, and you can see the following screen.

Notice: Don’t remove the USB cable or run other process during Backup process.

▷ **Restore**

Notice: Before the Restore work, please Backup or move the new generated backup files and programs to the PC or Micro SD card.

① Connect the unit to the PC
② Close every programs that are running on the unit
③ Select the Backup/ Restore under Tool menu on ActiveSync screen and the Restore tab.
④ Select Restore button
⑤ Once restore finished, push the reset button on the unit with Stylus.

2) Program installation with ActiveSync

▷ Setup.exe or Install.exe

① Download the programs or insert the program CD to the PC.

② Connect the unit to the PC

③ If this program has Setup.exe or Install.exe, double click this file on the PC. And this installation files will be copied to the unit automatically.

▷ *.cab

① Download the programs or insert the program CD to the PC.

② Connect the unit to the PC

③ Copy the *.cab file and paste to the My documents/Programs Files folder on the Mobile Device windows which generated by selecting Explore button of PC ActiveSync.

④ Please refer the Read Me file or other documents to check whether every needed files are copied correctly.

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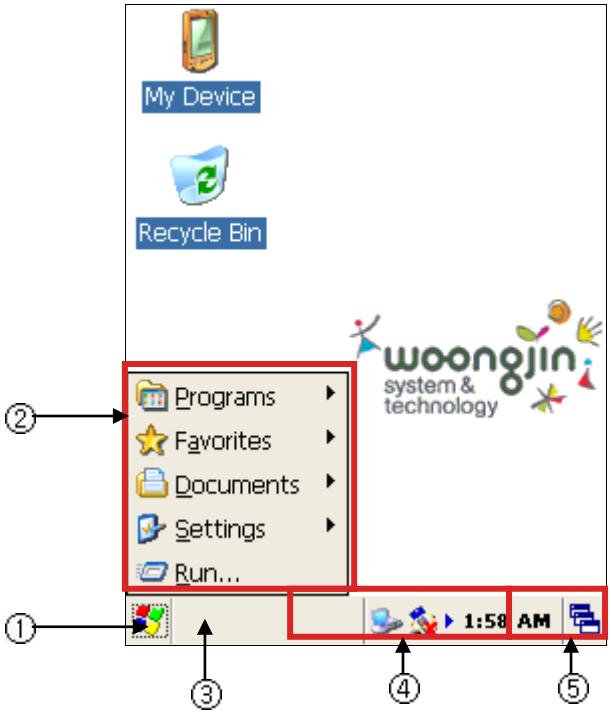
Shell and File Explorer

Shell



No.	Indication
①	Start Button
②	Start Menu
③	Running Program
④	Status Icon
⑤	Keyboard / Switch Program menu

▶ Main Screen

Main screen has same as Desktop PC

▶ Task Bar

- Start : show/ Hide start menu

* Program: basic program

* Favorites: Saved user selected favorites

* Documents : Files in the My Documents

* Setting : Setting for STM7100

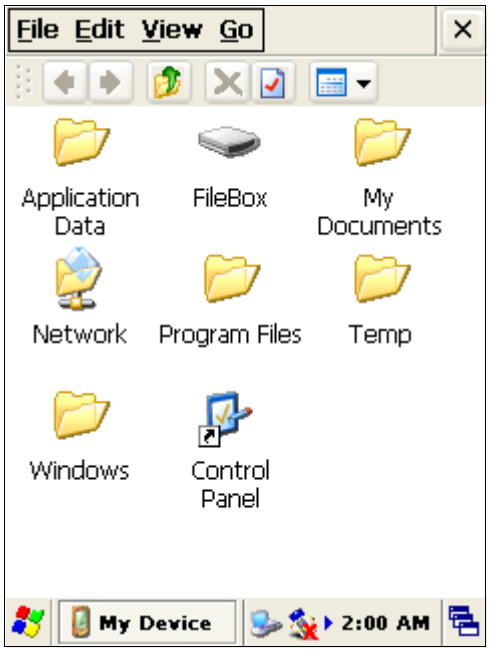
* Run : Program running

- Switch Program : Showing current running program and you can select the programs that you want.

- Status Icon : Showing the STM-7100™ device and application status. You can see (▲)button on the left side if the number of icons are over the limited number. If you click this button, you can see the icons that are not showing.

2. File Explorer

File Explorer has same functions as PC file Explorer.



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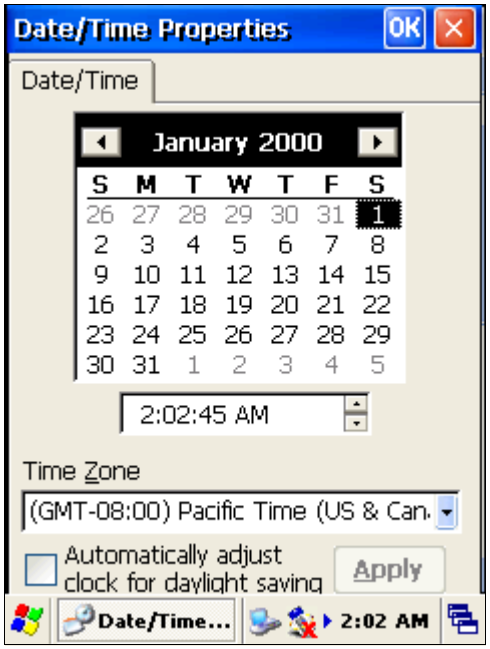
Device setting and Optimizing

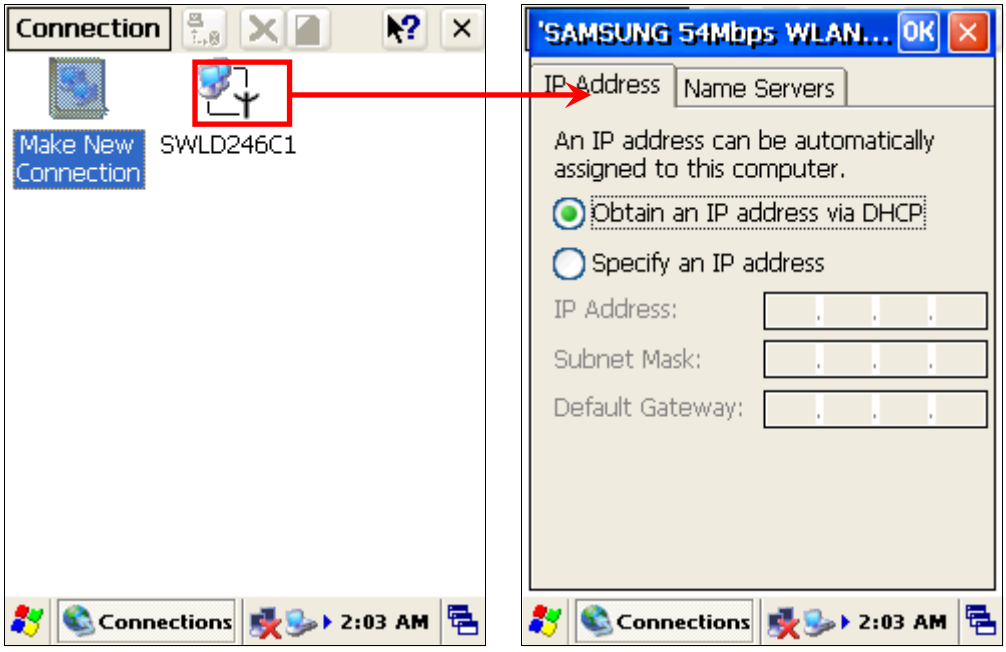
Let's check the control panel.

Date



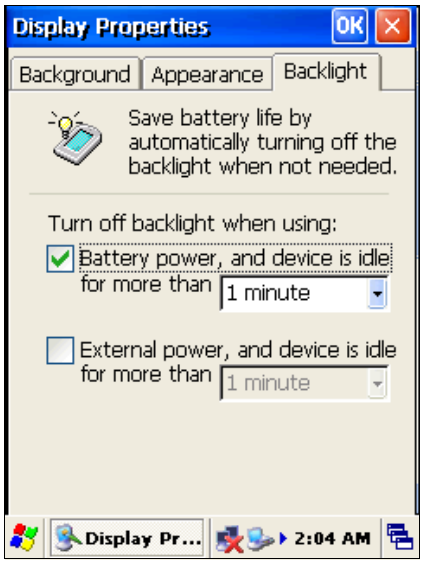
Network setting and Dial up Connection

- IP Setting for WLAN



Connecting through Serial ports

Display



Wall paper Back

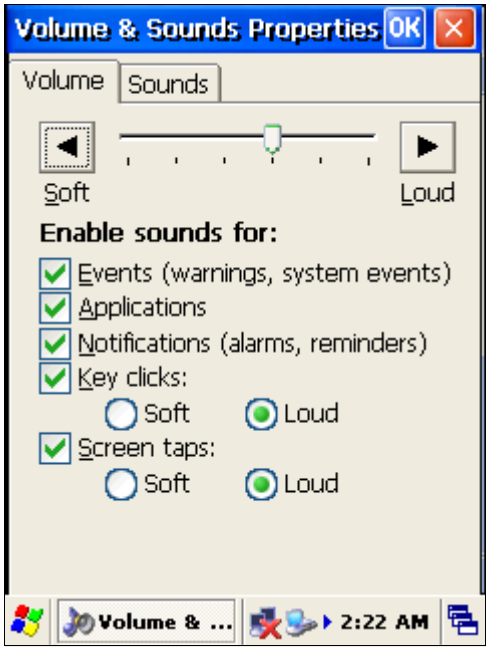
(can change it manually)

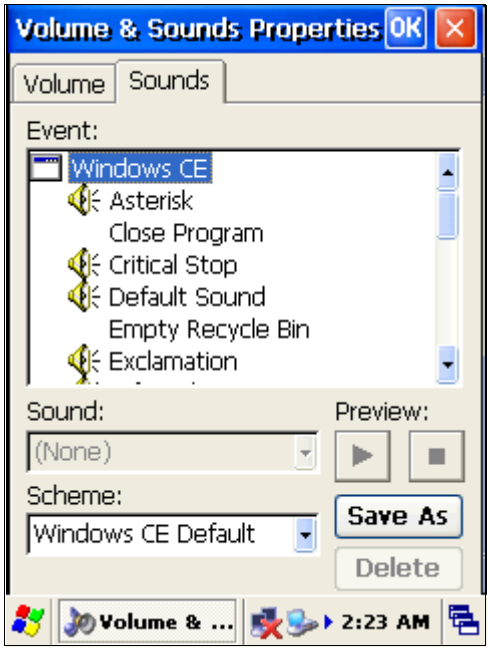
light control

(can adjust Backlight option)

Brightness

Volume & Sound

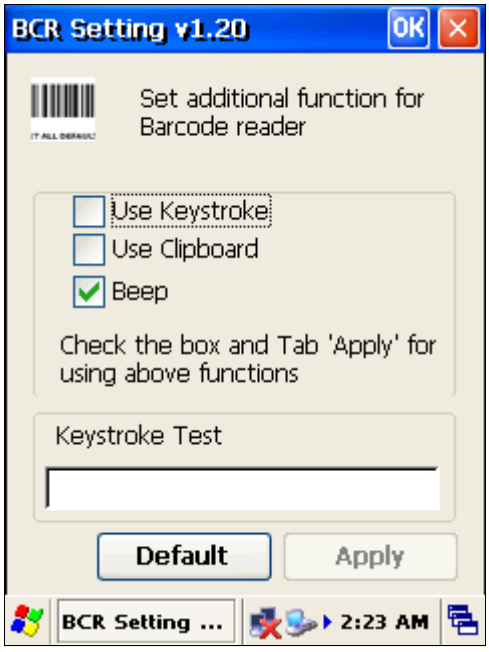




- Change Configuration & save (Can change setting of sounds, to hear selected sound)

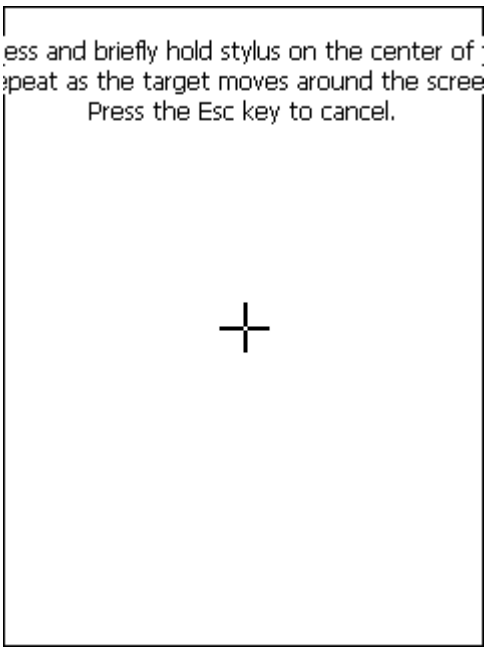
Scanner

Can test scanner and fix option for Test



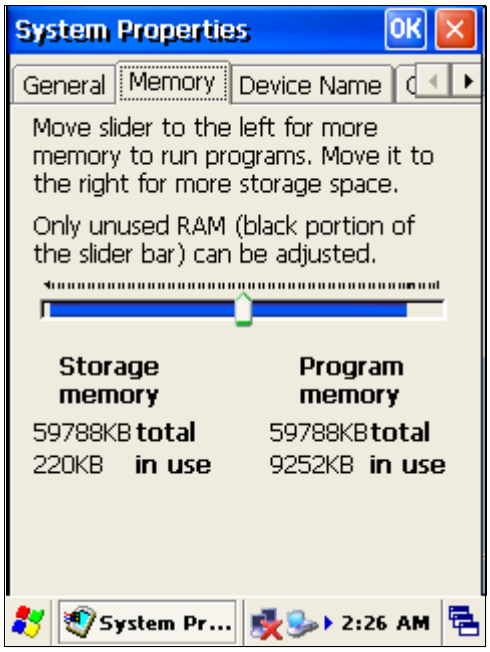
Stylus

When stylus does not operate correctly, you can tap Re-Align to revise the coordinates

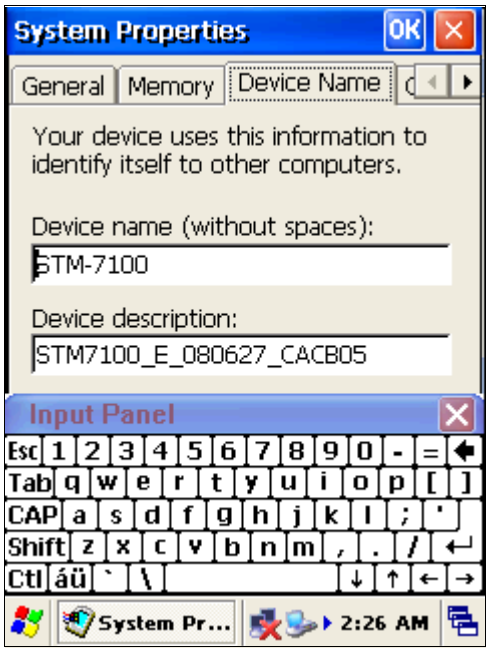


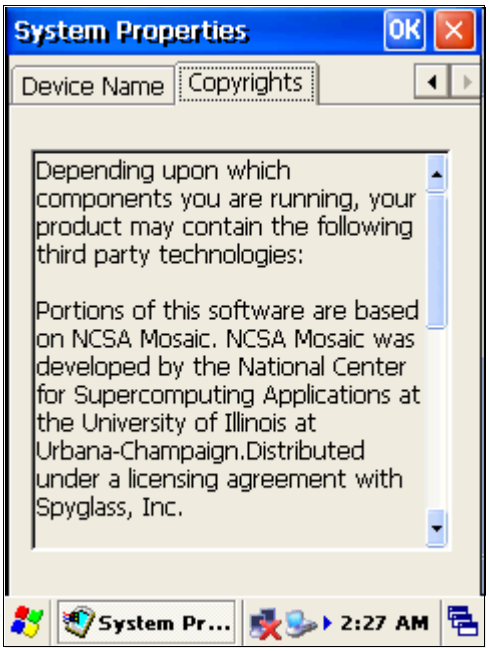
System Property

Basic system information



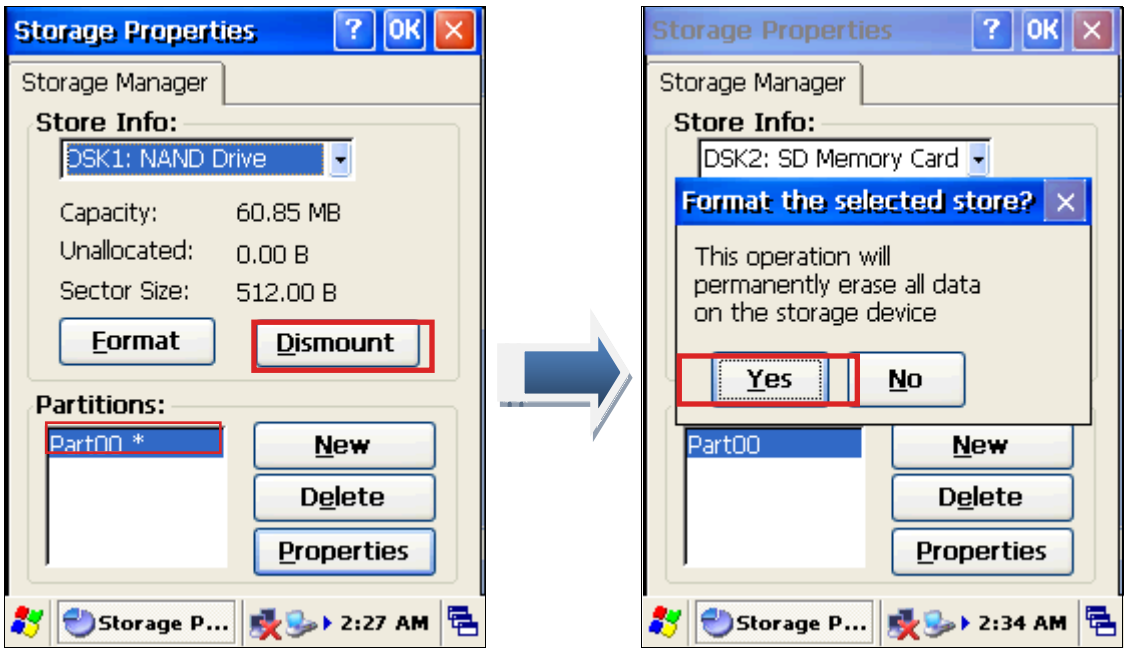
Storage memory & Program memory setting



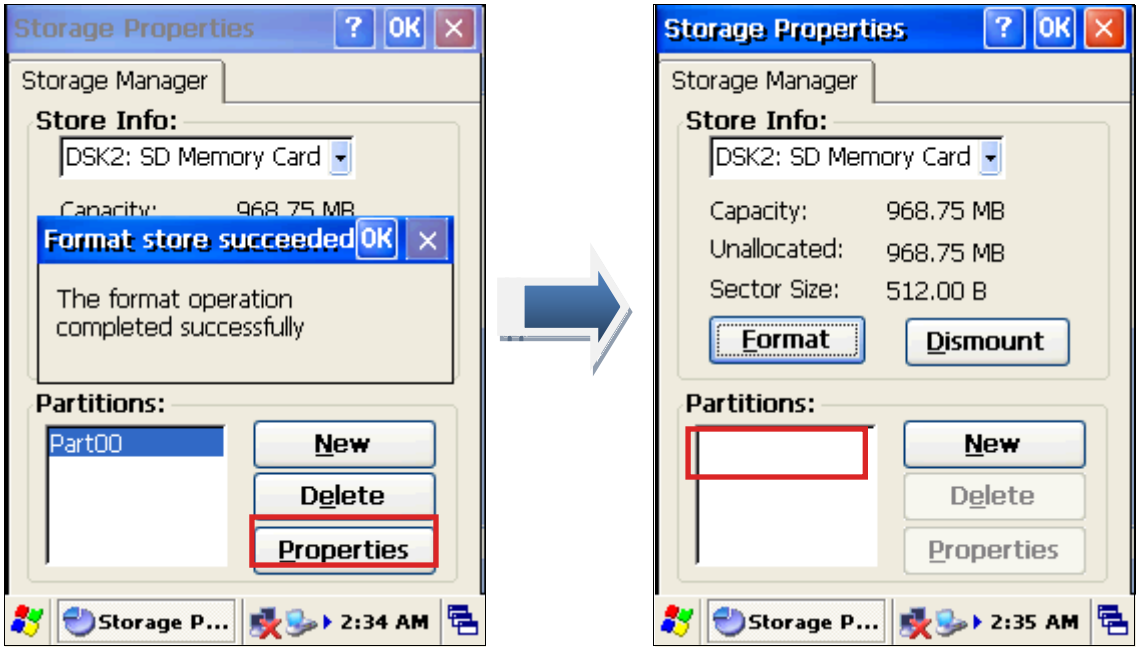


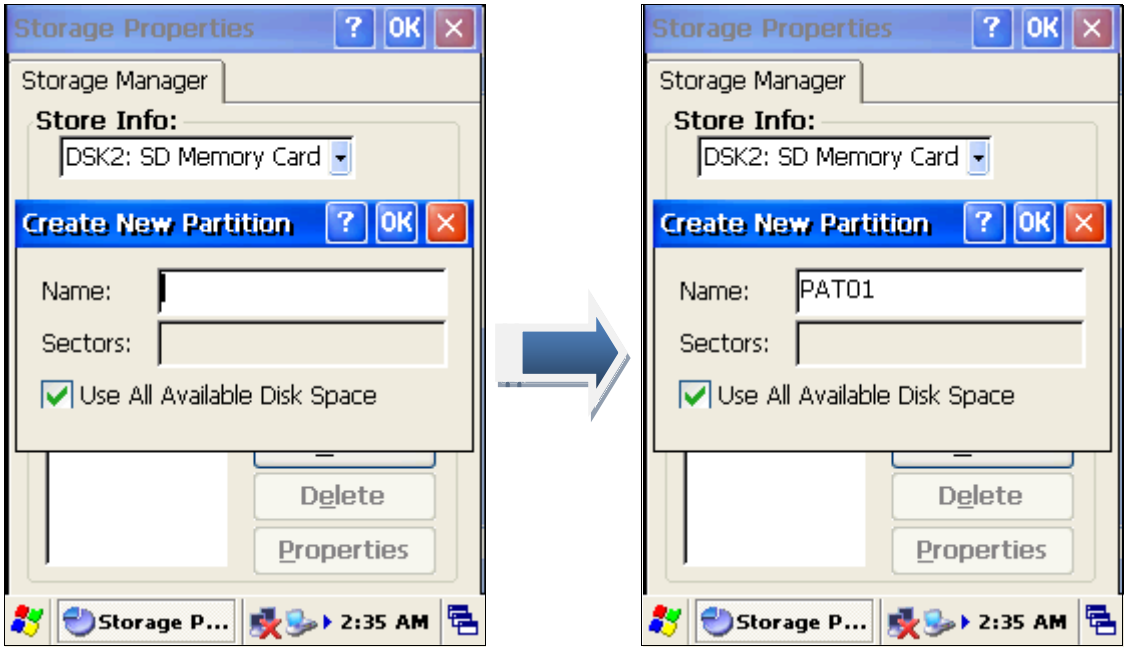
Format Storage (Filebox Micro SD formatting)

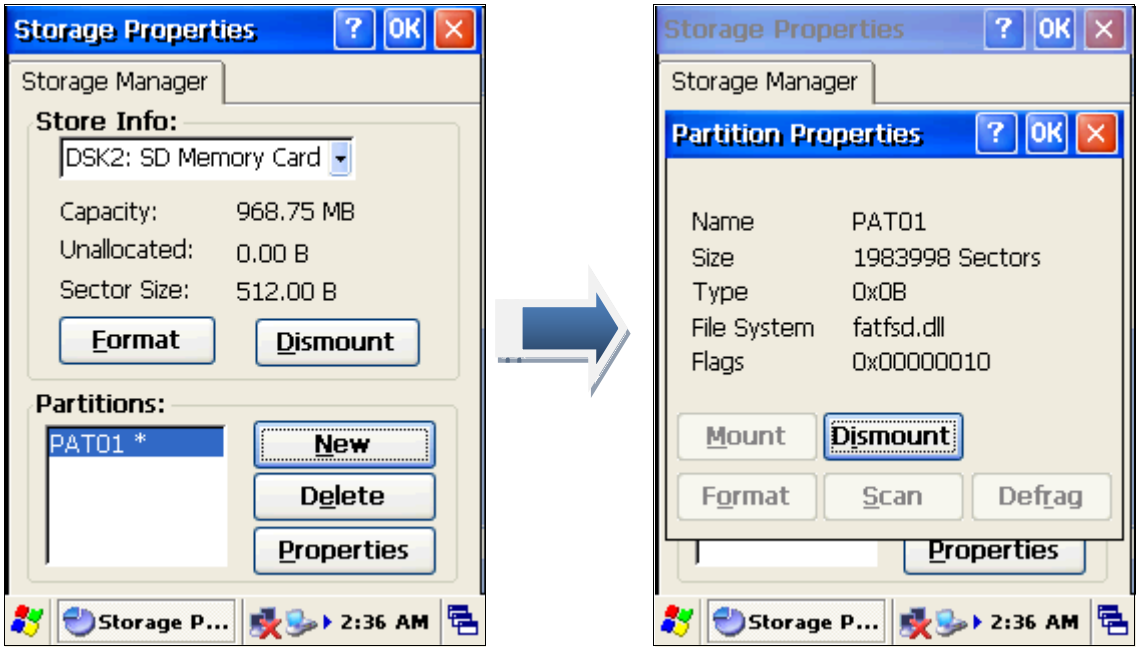
WARRNING: When the user format the system, all of users data is to removed

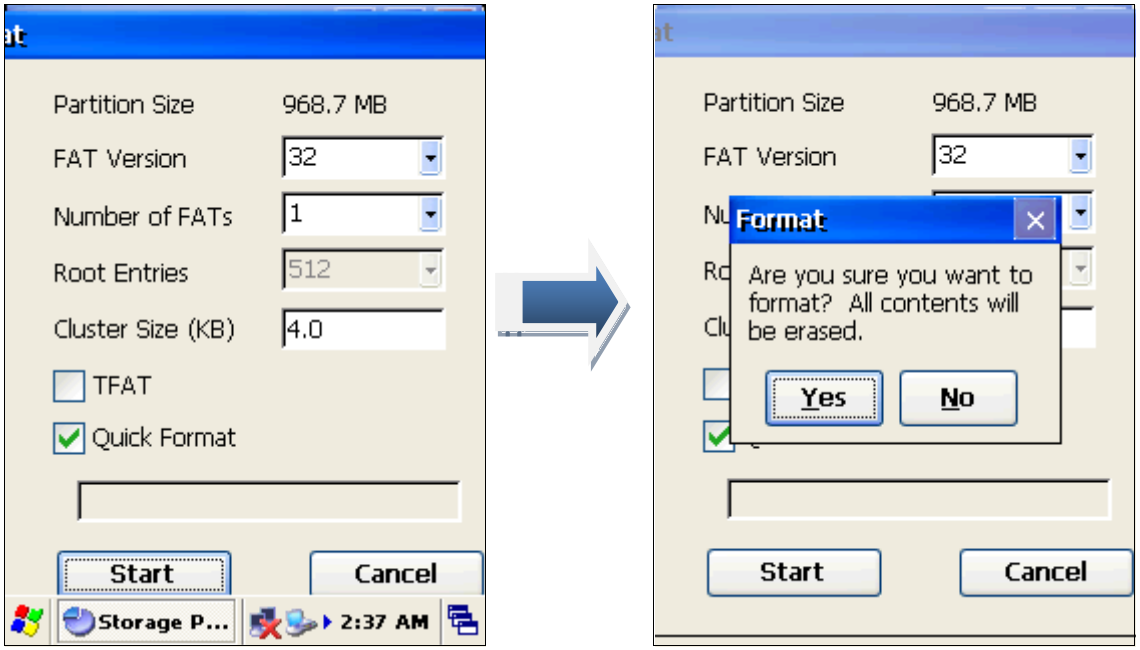


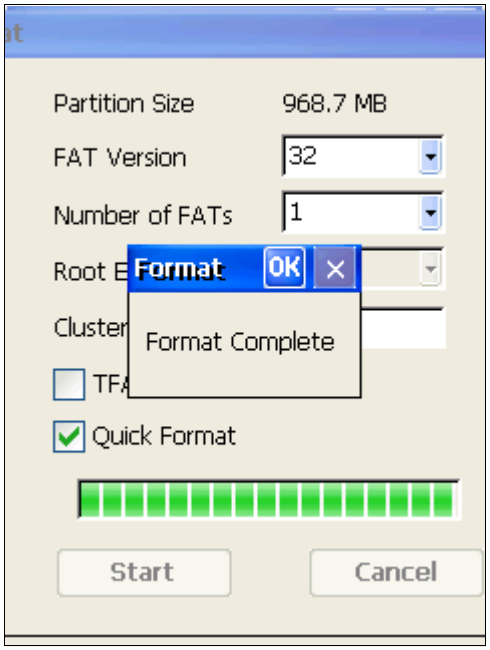
To Divide FileBox




Storage Properties
Storage Manager
Store Info:
DSK2: SD Memory Card
Create New Partition
Name:
Sectors:
Use All Available Disk Space
Delete
Properties
Storage P...
2:35 AM
Storage Properties
Storage Manager
Store Info:
DSK2: SD Memory Card
Create New Partition
Name:
PAT01
Sectors:
Use All Available Disk Space
Delete
Properties
Storage P...
2:35 AM


Storage Properties
Storage Manager
Store Info:
DSK2: SD Memory Card
Capacity: 968.75 MB
Unallocated: 0.00 B
Sector Size: 512.00 B
Format
Dismount
Partitions:
PAT01 *
New
Delete
Properties
Storage P...
2:36 AM
Storage Properties
Storage Manager
Partition Properties
Name PAT01
Size 1983998 Sectors
Type 0x0B
File System fatfsd.dll
Flags 0x00000010
Mount
Dismount
Format
Scan
Defrag
Properties
Storage P...
2:36 AM

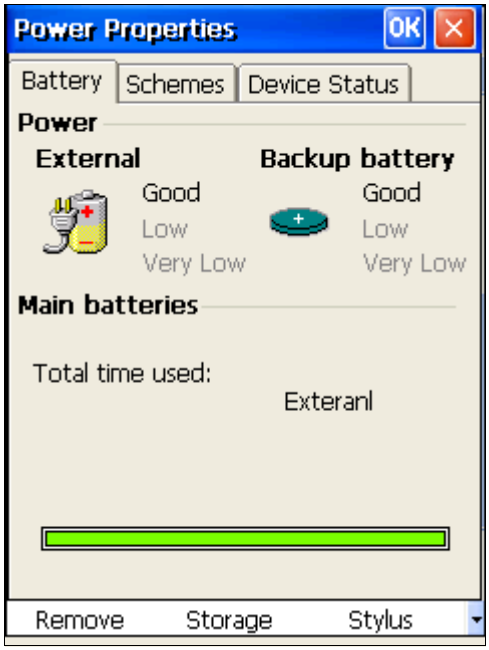


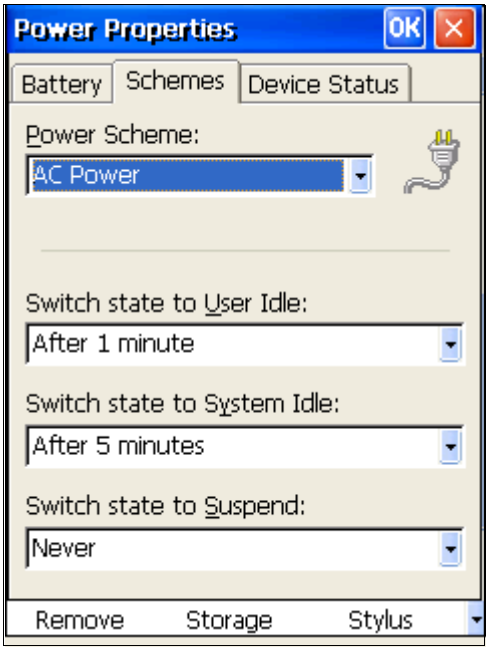


Option is needless to change. Tap Start to start formating. Check 'Quick format' to format quickly.

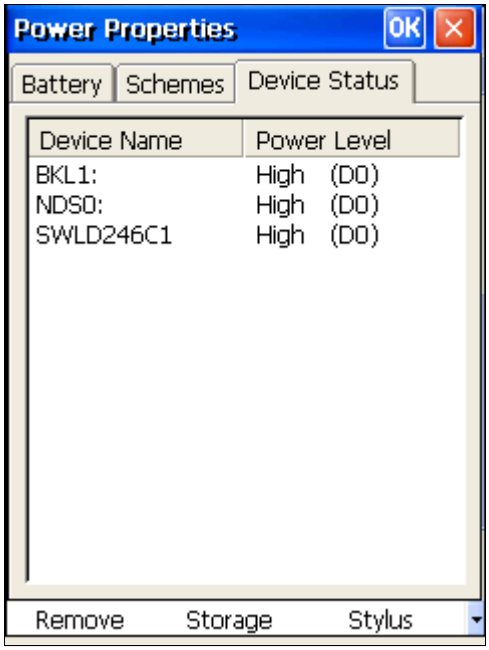
Tap Mount. (Otherwise, you cannot see it in File explorer.)

Power Property

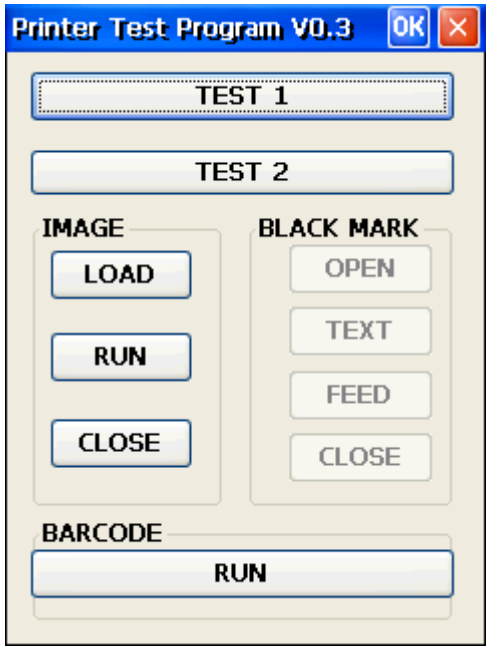




Can see charging/Battery status and Choosing Sleep conditions

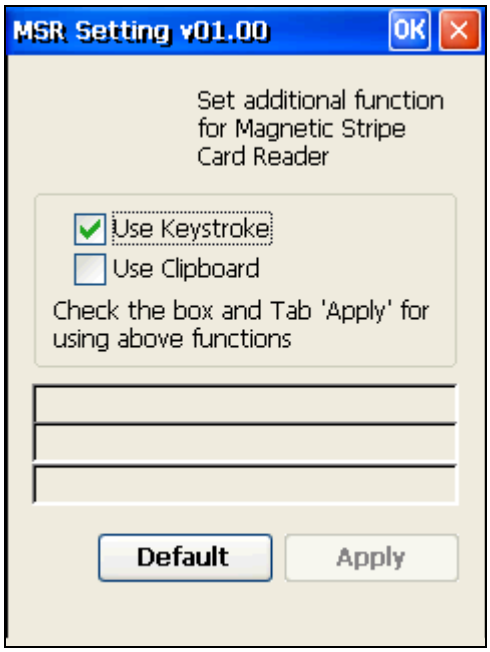


Printer Setting



Test Program to check printer status.

MSR Property



Card Reader Test Process

Read the magnetic stripe of a card to the end of it. Any direction is OK.

The result will be shown each track data

WLAN Power On/Off

Memory

You can use two kinds of memory for IMP-600(Built-in RAM and Micro SD Card).

1) Built-in RAM(Random-Access Memory)

RAM is volatile memory divided into Storage memory and Program memory and OS assigns the proportion. But, OS may not control memories in case there's not enough memory space. If you encounter the message Storage or Program memory shortage, follow directions below.

How to free Storage memory?

- Move needless files and programs to Web folder. Files in the folder do not use storage memory.
- Buy additional Micro SD Card and move files to a Micro SD Card.
- Delete unnecessary files.
- Delete temporary internet files for the Offline browsing in File Explorer.
- Remove programs you no longer use.

How to free Program memory?

- Stop programs you are not currently using. Most programs are automatically closed but it often does not work.
- As explained above, free storage memory. Empty storage memory can be assigned as program memory.
- Undock the device from the cradle and remove Micro SD Card.

2) Micro SD (Secure Digital) Card

Micro SD Card is a small and removable flash memory that allows you to store more data. You can back-up important data and transfer big-sized data to other devices. Micro SD Card is available in many electronic product shops.

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Troubleshooting

Check the following guide for the possible cause of a problem and how to correct it.

For more detail or other problems, visit our website (www.wjst.co.kr)

ActiveSync

Check following guide for problems when the device is connecting to PC.

Other problems concerning update issues see Help of ActiveSync on your PC or visit Microsoft mobile device web site www.microsoft.com/windows/embedded/ce.net/

- Check whether it is installed actual ActiveSync version on your PC
- Check the power is on
- Check the device is connected to PC with a USB cable in USB port
- Set USB connection as following.

  Microsoft ActiveSync > File > Connection Setting > select 'Allow USB connection with this desktop computer'
- Reset the device before mount on the Cradle
- Do not mount on the Cradle before PC is restarted
- Connect only one device to PC

Reset

Reset is equal 'Restart' of a computer. Carry out when pressing a button or tapping the screen does not respond. When your device is reset, all data that was not stored during operation will be deleted. Stored

data will be saved.

Resetting

1. Remove Micro SD card if it is mounted
2. When the power is on, press the ‘RESET’ button with the stylus, then release

Notice

: Do not reset while you are wearing Ear micro phone, it may cause serious damage to your ear.

Information

: If the function cannot be restored even if the reset button is pressed, initialize your device.

Initializing (Hard Reset)

When you initialize your device, it returns to the status when it was purchased.

Notice

: When you initialize your device, all data stored in the memory is deleted. Your device’s initially installed programs are not deleted. Before initialization, back up important data to your PC or Micro SD card

Initializing

1. Remove Micro SD card if it is mounted
2. Press RESET button while pressing and holding down-left button and ‘S’ button simultaneously.
3. When a screen appears, release RESET button and release others. Your device turns back to

the default setting.

Fundamental Problems

Q1. The power button is pressed but the power does not turn on

The built-in battery is exhausted. Please charge the battery

Q2. Even if the built-in battery is completely charged, it discharges after a short period of time.

Set the power management

- start > setting > display > lighting
- start > setting > brightness
- start > setting > power > battery (set idling condition)

For more detail, see chapter 8 ‘Device setting and optimizing’

Q3. The power was suddenly cut off

The built-in battery is exhausted. Please charge the battery.

If not, automatic suspend is active. Set the power management (start > setting > system > power)

For more detail, see chapter 8 ‘Device setting and optimizing’

Q4. The screen was tapped, but no correct action was executed.

Touch screen adjustment is incorrect.

Adjust the touch screen (start > setting > system > screen)

For more detail, see chapter 8 ‘Device setting and optimizing’

Q5. I want to check data in Micro SD card.

Open ‘File Explorer’ and mount Micro SD card. Then ‘Storage Card’ folder is formed.

For more detail, see chapter 2 ‘File Explorer’

Additional information

Usage and Maintenance

For prolonged use of device, please follow the instructions below.

- Device Cleaning
  - Utilize soft dry cloth for cleaning. Chemical cleaning solution can damage the device external housing
- Touch screen Cleaning
  - Before cleaning, turn-off the device. Utilize soft dry cloth with conventional window cleaning liquid to clean. Do not directly spray the cleaning liquid over the touch screen.
- Miscellaneous
  - When device is on for a prolonged period, the device can be warm. This does not mean the device is malfunctioning.

Device Handling

For safe usage and proper operation, please follow the instructions below

- Touch screen Protection
  - Avoid sharp materials to scratch the touch screen.

- Always use stylus that provided with the STM7100 device

- Avoiding Electrical Interference
  - STM-7100 can be affected by Electrical Interference from other devices. To avoid such case, one can change the device location and/or distance of between/among other devices.

- Avoiding High Temperature
  - STM7100 is designed to operate properly between 0~40 Celsius (32~104 Fahrenheit). If the device is to be operated outside of the recommended temperature range, the device itself and/or the stored data can be damaged.
  - Avoid leaving the device inside the automobile during hot summer period. The device has rechargeable Lithium-Ion battery. Exposed under hot temperature may damage (even cause explosion) or shortened the battery life cycle.

- Avoiding Moisture and Dust
  - Avoid using STM7100 under moisture or dusty environment. Moisture and dust may get into the device through button keys or switches and may damage electronics inside

- Repair
  - The producer will not responsible for any damaged device when repaired or attempted to be repaired/modified by un-authorized person or place.
  - Should device malfunctions, contact the producer and follow handling instructions provided by the producer.

Specification

- CPU : Intel PXA270(Bulverde) 520MHz

- OS version : Microsoft Windows CE.net 5.0
- Memory : 32MB NOR , 64MB NAND (up to 256) / 64MB SDRAM (up to 128)
- LCD Screen : 320x240, 3.5” 260K color TFT-LCD with Touch Screen
- Wireless Communications: 802.11b/g WLAN, CDMA (Data only)
- MSR : Track 1, 2, 3 support / multi direction
- Printer : 2 inch Thermal Printer built-in
- Expansion : Micro SD card slot for Memory expansion
- I/O : USB/Serial, Speaker, Stereo Ear-mic jack, DC jack, Bluetooth
- Battery : 1,900mAh Li-ion rechargeable (Detachable)
- Size : 76.2(max. 88.1) x 222 x 37(max. 49.7)
- LED : Notifications for various functions

Body-worn Operation

This device was tested for typical body-worn operations with the back of the device kept 0 cm between the user's body and the back of the device.

To comply with FCC RF exposure requirements, a minimum separation distance of 0 cm must be maintained between the user's body and the back of the device.

Third-party belt-clips, holsters, and similar accessories containing metallic components may not be used. Body–worn accessories that cannot maintain 0 cm separation distance between the user's body and the back of the device, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

FCC 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
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.