

# User Manual

## Model: MB7000 Rugged Handheld

*OS: Windows CE5.0*



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- Some parts of the terminal may not work properly under users' environments, programs or peripherals.

<b>Device Type</b>	<b>User's guidance</b>
A-level (IT device at work)	The DSIC MB7000 mobile computer is designed for industrial use and get the electromagnetic certificate for this purpose If you sell, or buy this device for other purpose, please replace it with a product for home use.
Type registration	This device cannot be used for life-saving services because it may cause interference.

*Note: Please use safety instructions before using the terminal*

**Revision History**

<b>No</b>	<b>OS Type</b>	<b>Details</b>	<b>Date</b>
1	WM/CE	Released User Manual	2012-Jan-13

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## 1. SAFETY INSTRUCTIONS I

- Make sure that battery terminals (metal part) should not contact with any conductive materials like a necklace or coin. Also make sure that batteries should not be damaged by teeth or a nail. Impact may cause an explosion of batteries.
- Use dedicated batteries only and do not use the batteries for any other purpose than operating this product. Using an inauthentic battery may reduce life of the product, or cause an explosion. (In this case, no warranty service will be provided.)
- Make sure to use the adapter or the standard charger supplied with this product. Using an inauthentic charger may reduce life of batteries or cause an explosion. (In this case, no warranty service will be provided.)

### Caution in relation with Laser Scanner



Do not flashing scanner light in human and animal's eyes. It could cause the damage of retina and amblyopia.

### Cautions in relation with batteries

Batteries may explode when damaged, impacted, heated, flooded or taken apart with a gimlet. Make sure to keep the batteries out of reach of children or pets.

Do not use the Product in the area with the risk of explosion.

If the Product is wet, do not put it in a device that may heat the terminal (heater, microwave oven, etc.). Heating batteries may cause an explosion, deformation or fault. (Water or any other liquid will change the color of the label inside the terminal. In this case, no warranty service will be provided.)

## 2. SAFETY INSTRUCTIONS II

Read these instructions carefully to keep yourself safe and to avoid loss of property.

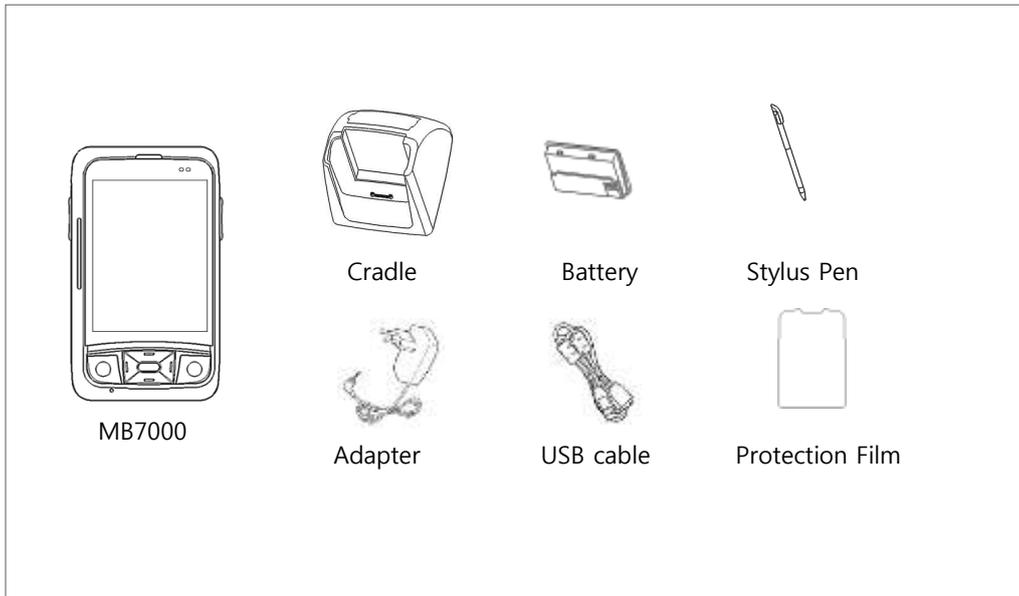
1. This product is compliant with EMC. For safety and health, use the authentic parts supplied by the manufacturer. Any inauthentic parts may affect safety
2. Do not press the power button when the product is wet. Touching the adapter or power cord with wet hands may cause an electric shock.
3. Do not modify, disassemble or repair the product at your discretion. Also, make sure to follow the safety Instructions. If you fail to follow any of the above instructions, no warranty service will be provided.
4. Record the data in the Product and keep it in a separate place. Data stored in the product may be deleted during repairing or upgrading the product. So, make sure to back up important data. (Bells, text/voice messages and characters are initialized.)
5. Do not use this Product in a hot or humid place. Using the product under a hot/humid temperature such as rain or sauna may cause a trouble. In this case, no warranty service will be provided.
6. Keep this Product away from magnetic products such as credit card, telephone card, bank book and traffic ticket. The magnetic field of the terminal may affect the data.
7. Avoid vibration and impact. When not in operation or when you are absent, pull out the power cord, and keep the product in a safe place.
8. Avoid any dusty place, and keep the power cord away from any heating device. When cleaning the product, pull out the power cord first. Dust off the pins of the power plug.
9. When storing a battery for a long period of time, recharge it and keep it at a room temperature. Even a fully charged battery will suffer reduced life due to the characteristics of the battery.
10. Painting this Product may damage appearance or display, or may cause a fault. Peeled-off paint may cause allergies depending on the physical conditions. In this case, stop using the Product and see a doctor.

### 3. FEATURES

Item	Description
CPU	<ul style="list-style-type: none"> <li>▪ PXA320, 806MHz</li> </ul>
OS	<ul style="list-style-type: none"> <li>▪ Windows CE.NET 5.0</li> <li>▪ Windows Mobile 6.5.3</li> </ul>
RAM	<ul style="list-style-type: none"> <li>▪ 256MB</li> </ul>
ROM	<ul style="list-style-type: none"> <li>▪ 1GB</li> </ul>
DISPLAY	<ul style="list-style-type: none"> <li>▪ 3.5" QVGA TFT-LCD</li> </ul>
INTERFACE	<ul style="list-style-type: none"> <li>▪ 1 RS-232, 1 USB 1.1 Client</li> </ul>
BATTERY	<ul style="list-style-type: none"> <li>▪ Rechargeable, 3.7V 13800mAh, Li-ion(Standard)</li> <li>▪ Rechargeable, 3.7V 2200mAh, Li-ion(Extension)</li> </ul>
SIZE	<ul style="list-style-type: none"> <li>▪ 121 x 69 x 18(23) mm (H x W x D)</li> </ul>
WEIGHT(g)	<ul style="list-style-type: none"> <li>▪ (incl. a battery)</li> </ul>
ADAPTER	<ul style="list-style-type: none"> <li>▪ 5V 2A</li> </ul>
WWAN	<ul style="list-style-type: none"> <li>▪ WCDMA/HSDPA 7.2Mbps (2100MHz)</li> <li>▪ GSM/GPRS/EDGE Quad Band(850/900/1800/1900MHz)</li> <li>▪ Max. Power : GSM900(33 dBm), DCS1800(30 dBm), WCDMA 2100(24 dBm)</li> </ul>
WLAN	<ul style="list-style-type: none"> <li>▪ Frequency : 2400MHz~2484MHz</li> <li>▪ No. of channels : 14</li> <li>▪ Antenna power : 10mW/MHz, Propagation type : GID, D2D</li> <li>▪ Modulation method : DBPSK/DQPSK/CCK(802.11b),OFDM(802.11g), OFDM(802.11n)</li> <li>▪ 802.11a Optional</li> </ul>
WPAN	<ul style="list-style-type: none"> <li>▪ Bluetooth Ver2.0, Class2</li> <li>▪ Frequency : 2400MHz~2483.5MHz</li> <li>▪ No. of channels : 79</li> <li>▪ Antenna power : 20uW, Propagation type : F1D, Modulation method: GFSK</li> </ul>
DATA CAPTURE	<ul style="list-style-type: none"> <li>▪ 1D Laser</li> <li>▪ 2.0M Pixel Color Camera with Flash (Auto Focusing)</li> </ul>

## 4. CHECKING COMPONENTS

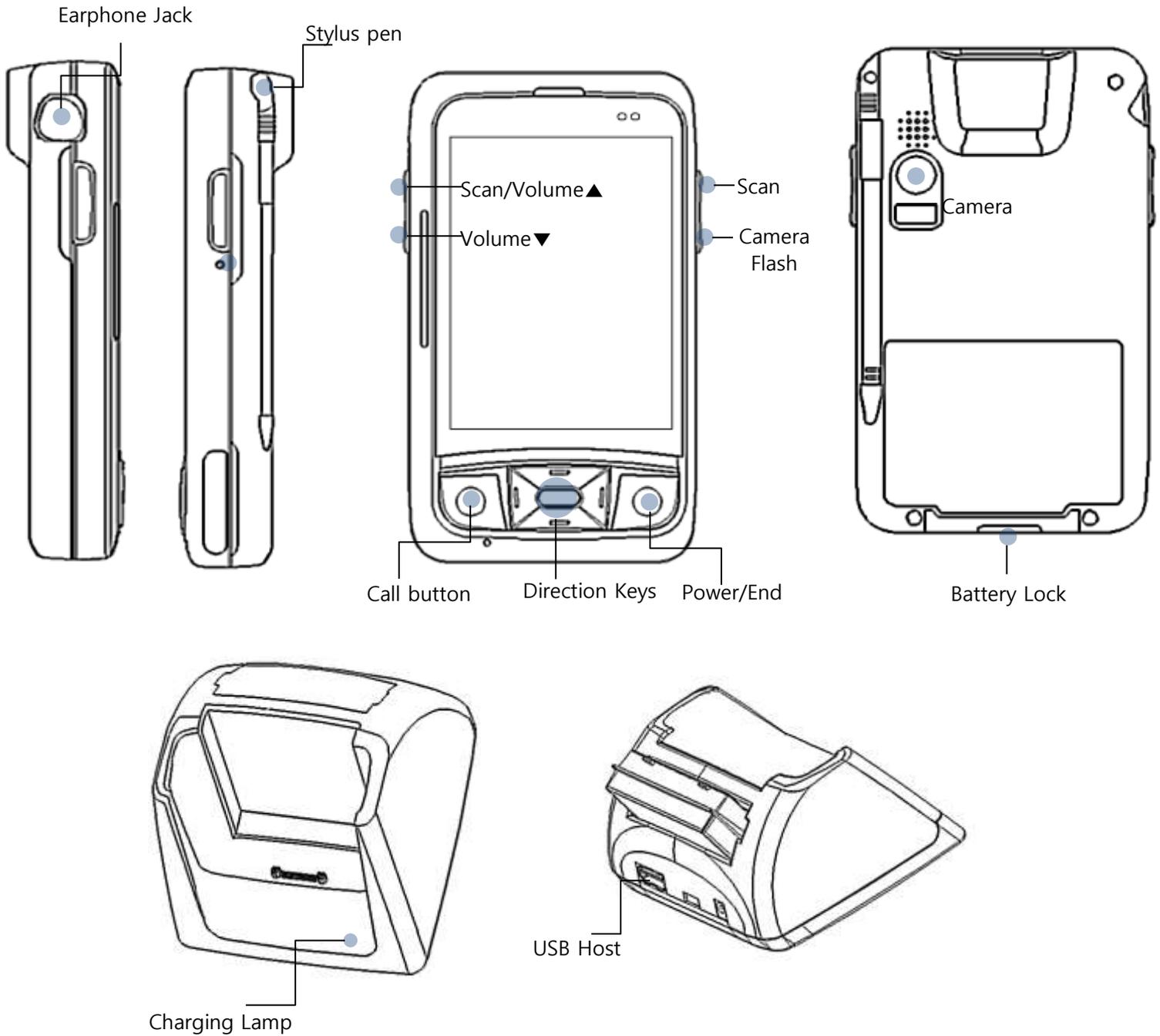
Please make sure below components are included in your package

**Note**

*The pictures illustrations are to help user's understanding product.*

*It may differ from actual product.*

## 5. CHECKING NAMES OF PARTS



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## 6. BUTTONS

Button	Description
	<p><b>Call button</b> Used to start the phone program. If you press this button once while using the phone program, a call is made to the last party in the call list.</p>
	<p><b>Power button</b> Used to switch On/Off the terminal.</p> <p><b>End button</b> Ends the phone program. You can finish a call by pressing this button during the call.</p>
	<p><b>Directions buttons</b> Used to move left/right/up/down/OK.</p>

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## 7. MOUNTING & DISMOUNTING BATTERY

### Mounting a battery - PDA

- ① Place the battery and push into the arrow direction
- ② Push the locker to left side

### Dismounting a battery - PDA

- ① Switch off PDA
- ② Push the locker to right side
- ③ Lift off the battery to the arrow direction

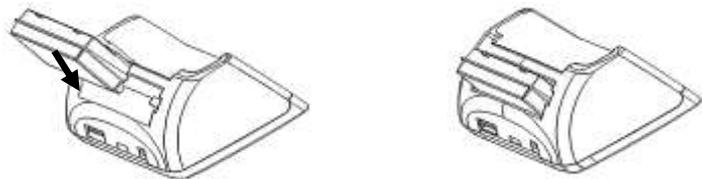


### Mounting a battery on Cradle

Place the battery and push into the arrow direction.

### Dismounting a battery from Cradle

Lift off the battery to the arrow direction



### Note

Before removing a battery, make sure to switch off the terminal. An abrupt power shut off may result in a trouble

## 8. USING MICRO SD CARD

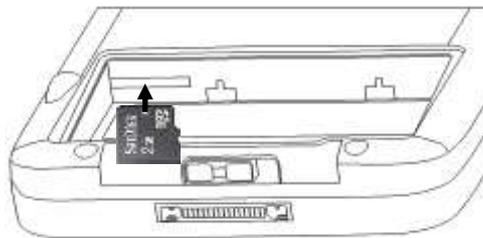
Micro SD Card is a micro flash memory media which is used to store and move data

### Inserting Micro SD Card

Push in a memory card to the arrow direction on the micro-SD card slot until it is completely inserted

### Removing Micro SD Card

Remove Micro SD card to the arrow direction as below.



### Precautions

Make sure to push in the memory card completely. If it is not inserted completely, the device can not recognize the memory card.

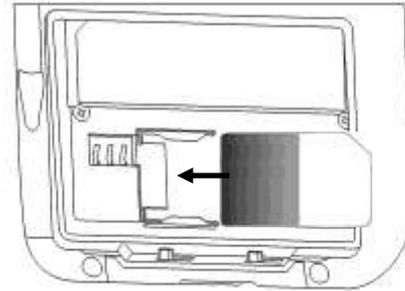
Shutting power off while using memory card may result in loss of data, or malfunction of the card and the terminal.

Make sure to back up critical data in the computer. The manufacturer resumes no responsibility for loss of data in the device.

## 9. USING USIM CARD

### Inserting a SIM Card

Insert a USIM card to the arrow direction



### Removing a SIM Card

Remove a USIM card opposite direction of the arrow in picture above

### About USIM Card?

USIM (Universal Subscriber Identity Module) is a user identification card which is inserted into a W-CDMA/GSM phone.

This card integrating the SIM card containing subscriber information and the Universal IC Card (UICC) containing communication and banking function provides various functions including user authentication, global roaming, and e-transaction.

This chip is required for communication with the 3rd generation WCDMA/GSM terminals. You can use this card in voice mobile call including international roaming and e-commerce service regardless of type of terminal and communication service provider

## 10. USING EARPHONE & RESETTING TERMINAL

You can use an earphone by removing the earphone cover on the right top of the terminal and inserting the earphone to the jack.



### Note

Earphone are sold as optional items. Please contact the nearest seller, if you wish to buy one.

## 11. SOFT RESET AND HARD RESET

### Soft reset

Press the [Reset] button on the right part of the terminal slightly with the stylus pen

### Hard reset

Press the [Reset] button and [Power] button at the same time

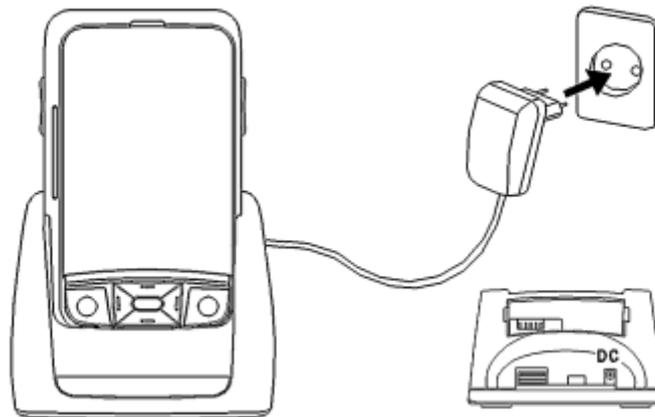


### Note

If there is collision between programs, or a program is stopped due to an unexpected situation, you may use reset function. It is like rebooting a computer. Any information that is not saved is lost.

## 12. CHARGING A TERMINAL USING CRADLE

Place the terminal on the cradle, and connect the adapter to the adapter jack on the rear side of the cradle

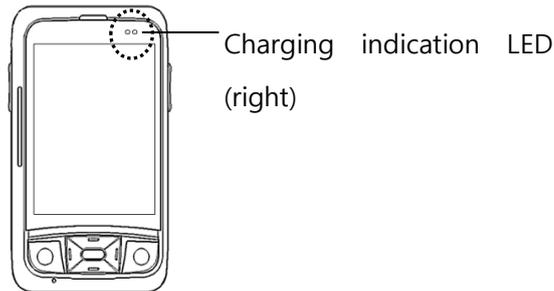


### Note

Use the dedicated adapter for maximum safety and effectiveness. Power cables are sold separately. Please contact the seller if you wish to buy one.

### 13. ABOUT BATTERY

- Capacity: 3.7VDC Li-ion 1100 mAh (2200mAh Optional)
- Standby time(continuous) : Std.(at least 240hrs) Ext.(about 480hrs)
- Talk time(continuous) : Std.(at least 240hrs) Ext.(about 240hrs)
- Charging time : Std.(at least 240hrs) Ext.(about 240hrs)



#### Note

- ▶ In order to prevent damage of battery power, the modem is switched off automatically. Please charge the battery.
- ▶ The continuous talk time and standby time are measured under the actual environment, but may vary depending on the usage type.

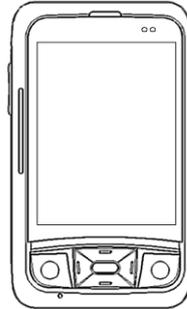
LED Status	In charging	Charging finished
		Red

[ LED charging status indication ]

- ▶ The charging indication lamp on the cradle and the terminal are switched to green when charging is finished. The battery will not be damaged if charging is continued.
- ▶ The time required for charging is depending on the charging status. If the charging time gets shorter by half, you need to purchase a new battery.

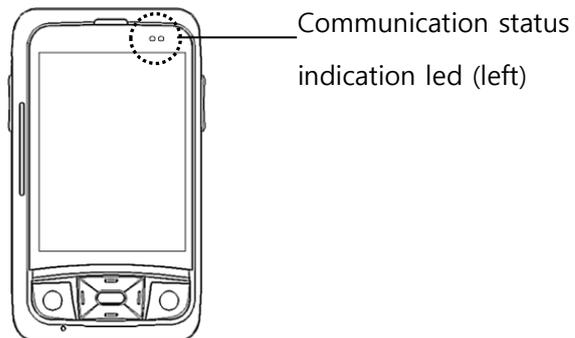
## 14. SWITCHING ON/ OFF POWER

You can switch on/off power by pressing the [Power] button on the front part of the terminal



## 15. COMMUNICATION STATUS INDICATION

For the terminals which support WWAN communication, you can view the WWAN communication status with the [Communication status indication lamp] on the upper left side of the terminal.



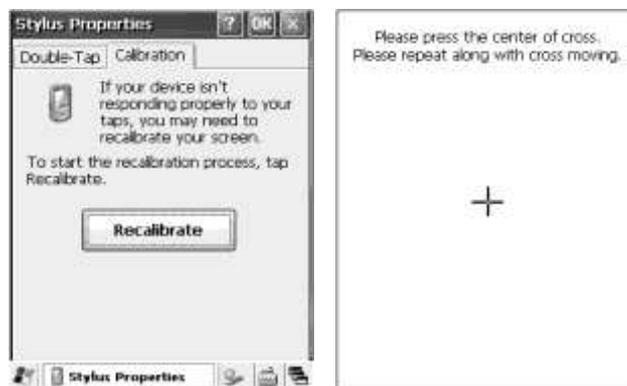
## 16. ADJUST SCREEN

You can set the stylus pen input value on the LCD screen

### Setting screen

Start ► Settings ► System Tab ► Screen ► Align Screen

Point the target in the center of the screen with the stylus pen. As the target moves to left top, left bottom, right bottom and Right top, point the target accurately



## 17. USING STYLUS PEN

Use a stylus pen to select/execute/move a target on the screen. The stylus pen is attached in the top right of the terminal

	<p><b>Tap</b></p> <p>You can touch icons on the screen with the stylus pen to select or execute the icon as you click the left mouse button</p>
	<p><b>Drag</b></p> <p>Used to select multiple items. You can select characters or images as you drag the mouse pointer</p>
	<p><b>Tap and Hold</b></p> <p>Used to view the functions of the selected item.</p> <p>If you tap and hold with the stylus pen, a menu pops up as you select an item and click the right mouse button</p>

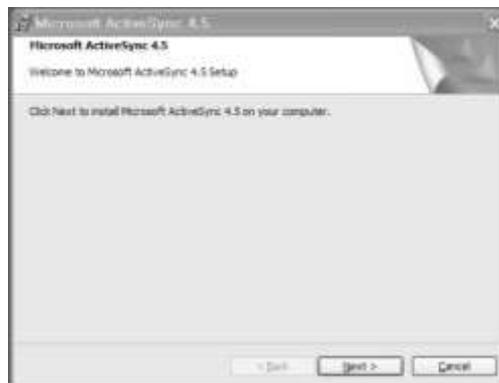
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## 18. INSTALLING ACTIVE SYNC

### Note

To connect the terminal with PC, you need to install the [Microsoft ActiveSync] program in your PC. If the [MicroSoft ActiveSync] program is already installed in your PC, you don't need to install the program again. The images may vary depending on the version of [Microsoft ActiveSync], but the functions are the same

1. Download [Microsoft ActiveSync] from the website of Microsoft, and install the program in the PC



2. On the [License Agreement] window, select <Agree>
  - ▶ On the [Customer Information] window, fill in the <User Name> and <Company> field
  - ▶ On the [Target Folder] window, select the <Installation Location>



3. The [Microsoft ActiveSync] is installed when installation process is ready



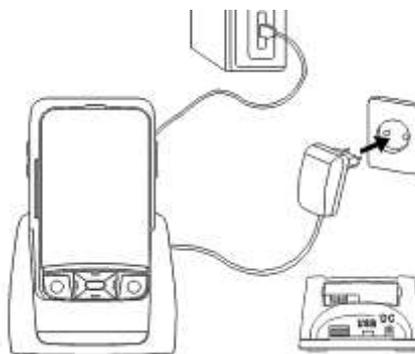
4. The [Microsoft ActiveSync] program is installed

## 19. USING ACTIVE SYNC

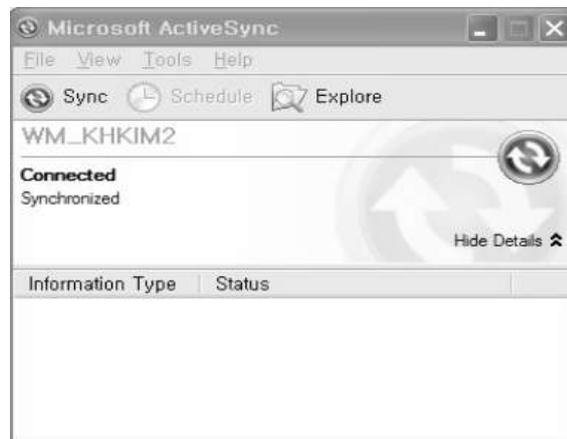
### Note

The screenshots below are for the [Windows Mobile] version. The images may vary depending on the version of the software. Window images for [Windows CE] are different from the samples, but the functions are the same with those of [Windows Mobile]. You must connect the terminal to PC or notebook first to use [MicroSoft ActiveSync]. You can copy/paste files, or install/uninstall programs through synchronization with the terminal. USB cables are sold separately. Please contact the Customer Care Center if you wish to buy one

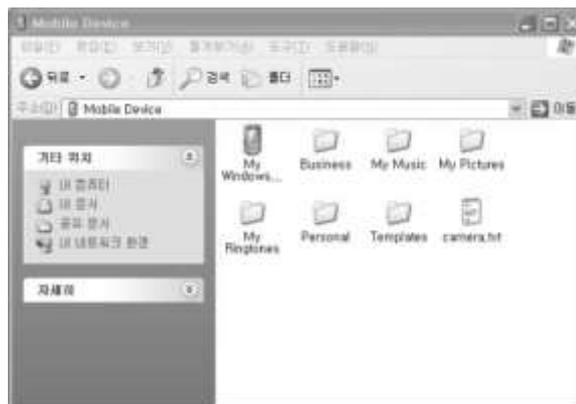
1. Place the terminal on the cradle, and connect the terminal with the computer through the USB cable



- When the terminal is connected with the computer successfully, the [Microsoft ActiveSync] program is started automatically. Click the [Search] button.



- The <Mobile Devices> folder shows the image, music or document folders in the terminal. You can save the files in the computer.



### Precautions in using ActiveSync

The message "Unknown Device" pops up after the computer detects the USB device. This message may be displayed when you switch on the terminal as it is mounted on the cradle. If you dismount the terminal and then mount it back to the cradle, the ActiveSync program works properly. The message "Connecting..." continues. Dismount the terminal from the cradle to disconnect it from the computer. On [ActiveSync], select **File ► Set Connection ► <Allow USB Connection>**, and then, click [ok]. Connect the terminal again.

If connection attempts continue to fail and the message "Unknown Hardware Device" pops up

Abnormal status of the USB host in the computer may result in connection fail. Remove the terminal from the cradle, reboot the computer, and then, return the terminal to the cradle.

The terminal does not work when you remove and return the battery. To prevent this problem, you should press the [Power] button with the stylus pen so that Windows Mobile should "Exit System" before you remove the battery. If you had to remove the battery due to an unavoidable situation, and the terminal does not work properly, press the Power button and the Reset button at the same time for hard-reset. Note that hard-resetting deletes data from the memory. Only the data in the file storage are preserved.

## 20. USING USB CABLE

Start ► Settings ► Control Panel ► PC Connection

You can use various USB peripherals connected with the terminal by selecting [Enable direct connections to the Desktop Computer]. This menu is enabled as the peripherals are connected with the terminal through USB cables

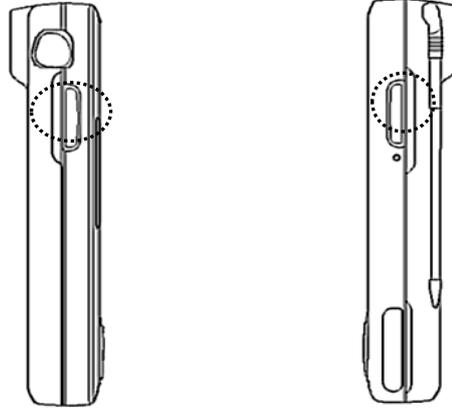


### Note

[PC Connection] increases consumption of battery power. You can save battery by deselecting this function when you don't use any peripherals

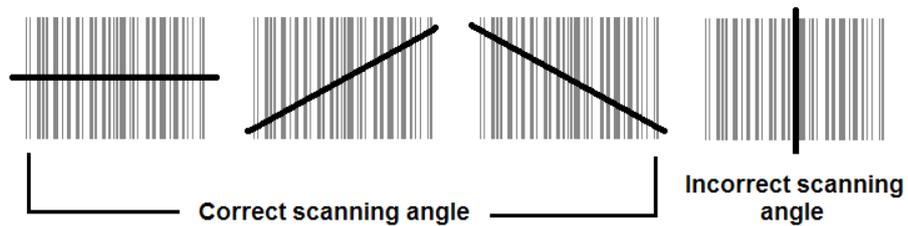
## 21. USING BARCODE

You can scan barcodes by pressing the [Barcode] button on the side or front of the terminal.



## 22. SCANNING BARCODE

When you scan barcodes, maintain the correct distance (10cm) and angle between a barcode and the barcode scanner window.



### Note

When you use barcodes in a specific program, contact the developer of the program for details.

## 23. READING BARCODE

### Desktop ► BarcodeTray

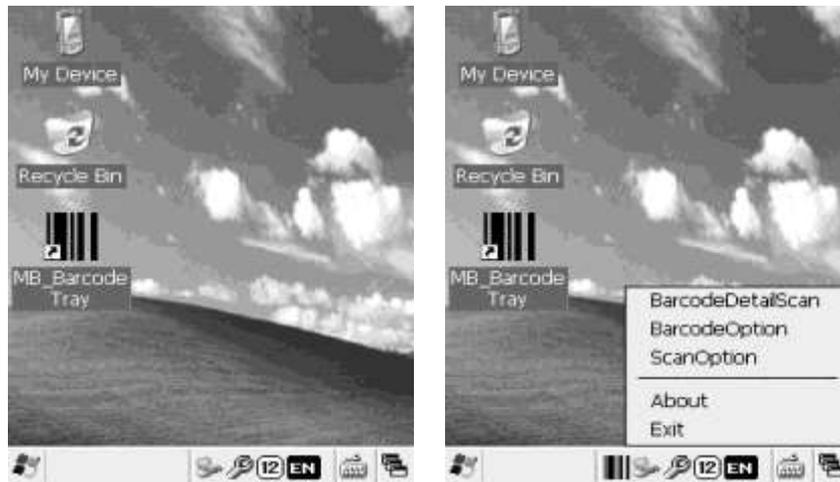
You can set up barcode detail & barcode & scan option by clicking barcode icon at the bottom of the screen.

[BarcodeTray]

BarcodeDetailScan : read and check barcode

BarcodeOption : choose barcode option

ScanOption : choose scan option



## 24. PHONE MAIN SCREEN

		Received Signal Strength Indication
		Notice icon when a call received
		When making a call is not possible
		Vibration mode icon
		Vibration and bell mode icon
		New message indication icon
		Data communication status icon
		Battery indication icon
		Call List button
		Phone Book button
		SMS button
		Data comm. Connection button
	Settings button	

## 25. MAKING A CALL

1. In [Phone main screen], after inputting a phone number by button, press [SEND] button.
2. If connection is done, you can talk.
3. When ending a call, press [END] button in screen or press [End] button in body.
4. In [Phone main screen], if pressing [SEND] button, the latest received number is displayed and then, if pressing [SEND] button, you can call the number.

**Note:** [SEND] button in Ear-phone operates in same way

5. If pressing [SEND] button in Call List/Phone Book/SMS, you can make the selected number.



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## 26. RECEIVING A CALL

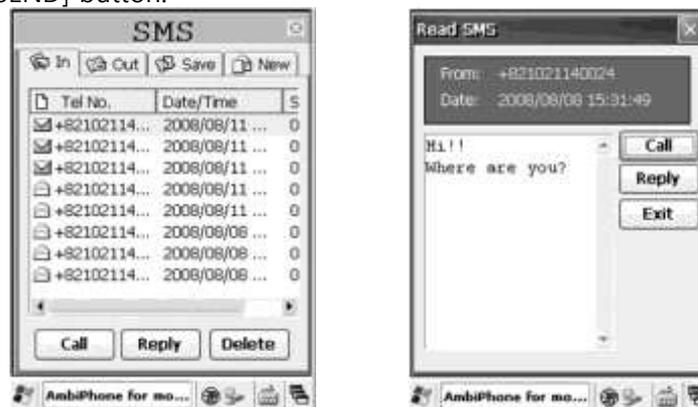
1. If a call received, [Receiving a call] screen comes out and then, you can talk by pressing [SEND] button.
2. In case that Ear-phone is connected, you can talk by pressing [SEND] button in Ear-Phone.
3. If you set up notice method as vibration, when a call received, it vibrates.



## 27. CHECKING & TRANSFERRING SMS

### Checking SMS

1. If a message received, an icon is displayed with the notice of message received.
2. By pressing  button in main screen, you can move to [SMS checking screen].
3. By pressing an unread message in [Inbox], it moves to [Read SMS], you can check the received message.
4. In [SMS] and [Read SMS], You can make a call by pressing
5. [Call] button or [SEND] button.



### Transferring SMS

1. In main screen, press [SMS].
2. To send a message, select [NEW] tap.
3. Input message contents and receiver's phone number.
4. If pressing [Send] button or [Send] in body, you can send the message.
5. After writing a message, if you press [Later] button, the message is not transferred and saved in [Save] tap. After then, you can send it by pressing [SEND] button



## 28. CONNECTING BY GPRS

1. Move to [GPRS status] screen by pressing [Data communication] button.
2. Move to [Dial-Up connection] setting screen by pressing [Connect] button.
3. Input connection information and then press [Connect] button.



## 29. CONNECTING BY CONTROL PANEL

1. Select [start] ► [settings] ► [Control Panel] ► [network Connections] and then, select [GPRS].
2. Connect by selecting [Connect] in [Dial-up Connection].
3. If the connection done, you can use internet explorer or internet in other programs.
4. To end the use of internet, Select connection icon in task bar and then, you can end by pressing [Cancel] in [GPRS Status].



## 30. TAKING PHOTOS

You can use the camera program to take the pictures and record videos.

Desktop ► MB\_Camera or My Device ► Nand ► MBApp ► MB\_Camera.exe

To take a picture, press the [shot] button. When you take a picture, the images are saved as .jpg

files and stored in the My Device ► Nand ► Album folder.



### Options

- **Size**  
320x240/640x480/800x600/1280x768/  
1280x1024/1600x1200
- Path : Save path
- Name : Date/custom
- Format : BMP / JPG
- JPEG Quality : 40/60/80/100



### Note

Camera program would be ended, or turn off if battery is very low

## 31. VIEWING ALBUM

Start ► Pictures & Videos ► Camera ► Thumbnails

You can extend, or reduce the selected Still/Video, or check information on the Still/Video



## 32. OWNER INFORMATION

You can register user Name, Company, Address, Telephone, E-mail and Notes, and select if they are to be displayed when the terminal is switched on

Start ► Settings ► Control panel ► Owner

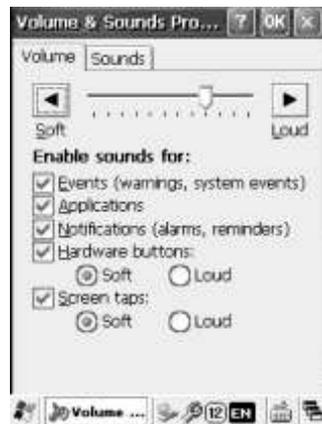


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## 33. ADJUSTING VOLUME & CHECKING BATTERY

### Adjusting Volume

Start ► Settings ► Control Panel ► Volume & Sound Properties

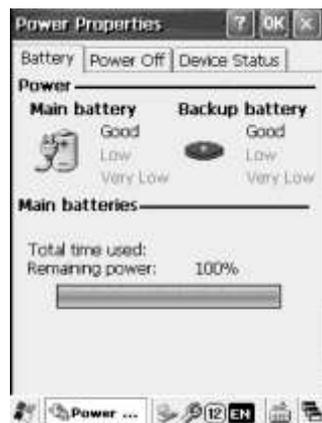


### Checking Battery

Start ► Settings ► Control Panel ► Power Properties

Battery : check battery status

Power Off : setup power off time when using battery



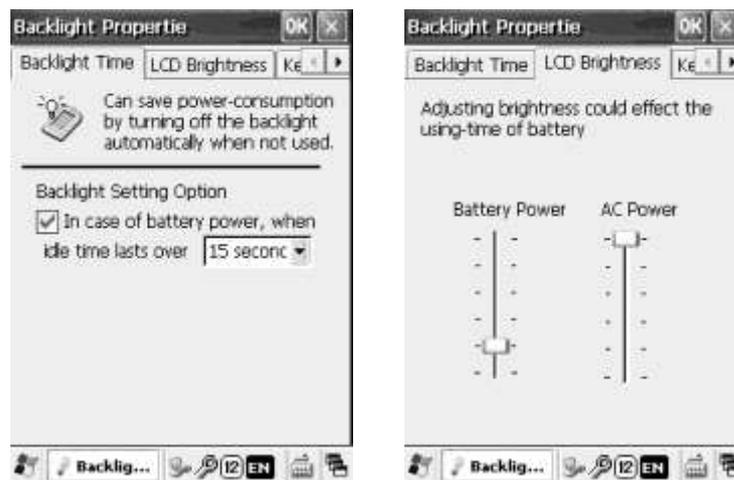
## 34. BACKLIGHT

You can set the LCD Off time to save battery and external power when you don't use the terminal.

You can control brightness by moving the slider bar. **Start ► Settings ► Control Panel ► Backlight ► Backlight**

Time/LCD Brightness/ Keypad Backlight

The nearer to [Dim], the longer the battery life extends.



## 35. REMOVE PROGRAMS

The list of programs installed personally or by the company, except the basic programs, is displayed. **Start ► Settings ► Control Panel ► Remove Programs**

Select the program you wish to uninstall, and then, select the [Remove] button



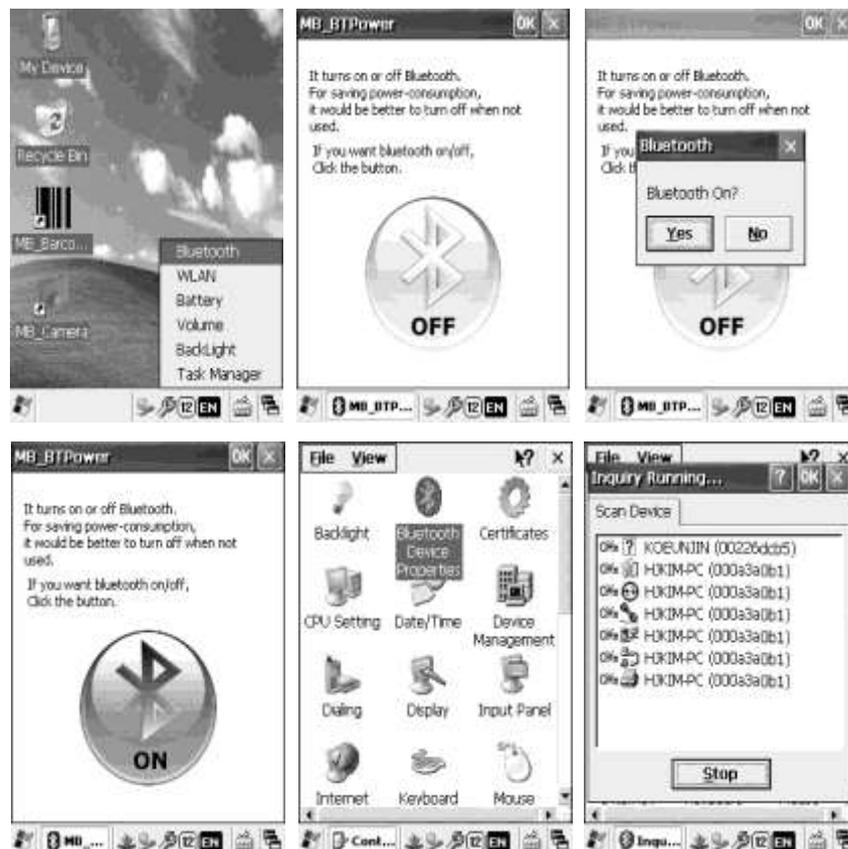
## 36. BLUETOOTH

Devices Tab

Set the Bluetooth Device (Bluetooth printer, card reader, etc.) for communication with the terminal.

**Start ► Settings ► Control Panel ► Bluetooth device Properties**

1. Turn on the Bluetooth devices (Bluetooth printer, Card reader etc.) to communicate with the terminal.
2. [Control panel] ► [Bluetooth device properties] ► [Inquiry Running]. Check if the device which was turned on is searched.
3. Check if the message "input pin number" is appeared.



**Note**

According to the Bluetooth devices, it is different to communicate with the terminal. Please refer to the manual of the Bluetooth device before starting communication with the terminal.

## 37. Wi-Fi (WLAN)

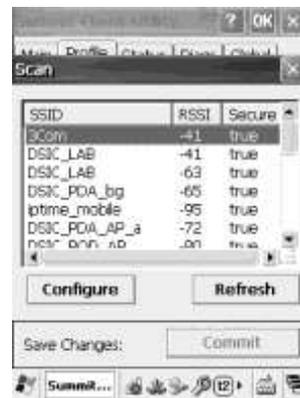
You can set the Wi-Fi environment for access with AP (Access Points) through wireless Internet.

Bottom Tray ►  ► Wireless LAN

Turn of / off WiFi

Start ► Settings ► Control Panel ► Wi-Fi

Setup AP of Wi-Fi, or check the status



## 38. Q&A

***Q The terminal is wet. What can I do?***

**A** Detach the battery from the terminal and dry it. If the terminal still doesn't work after it is dried for a certain period of time, it is required to replace the main board and other parts.

***Q The terminal fails to boot.***

**A** The program might have been damaged. Reset the terminal, and if the problem continues, contact the Customer Care Center.

***Q The battery is not charged.***

**A** Make sure that the terminal is properly connected with the desktop charger, and check if the lamp works properly. Rub off the charging terminal clean. If it is not charged normally, it can be because of aging or failure of the battery. (Warranty period for a battery is 6 months.)

***Q How can I ask for after-sales service?***

**A** Please send the product to the Customer Care Center in the head office through a pre-paid delivery service. Upon repairing the product, we will send you the product through a pre-paid delivery service.

***Q Can I check if the terminal is sent accurately?***

**A** You can get the invoice number from the Customer Care Center in the head office. Contact the delivery service to find out the current location of the terminal.

***Q The battery goes dead too soon.***

**A** Peripherals such as barcode reader and printer will consume a large amount of battery power.

If this phenomenon continues, it may be because of aging of the battery. You should use a new battery

**DaiShin Information & Communications Co., Ltd.**

For more information, contact your reseller or go to;  
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