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EMC and **Safety Notice**

FCC Regulations:

- This mobile device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
- •This mobile 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.
- This mobile device 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 radiated 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.

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

▶ RF Exposure Information (SAR) for GSM Function

This model device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless mobile devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the poser required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the model device as reported to the FCC when tested for use at the ear is 0.46 W/kg and when worn on the body, as described in this user guide, is 0.092 W/kg for PCS Body SAR and 0.04 W/kg for WLAN Body SAR.

(Body-worn measurements differ among device models, depending upon available enhancements and FCC requirements.)

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID: IR5DA04IM.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and the positions the handset a minimum of 1.5 cm from the body. Use of other enhancements may not ensure compliance with FCC RF exposure guidelines. If you do no t use a body-worn accessory and are not holding the device at the ear, position the handset a minimum of 1.5 cm from your body when the device is switched on.

Federal Communications Commission Radio Frequency Interference Statement

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause interference to radio communications. This equipment has been tested and found to comply with Class B digital devices, pursuant to Part 15 of the FCC rules which are designed to provide reasonable protection against such interference when operated in a commercial or residential environment.

Countermeasures if interference occurs

You are encouraged to do the following if interference occurs while you are operating the device:

- 1. Turn OFF the unit and unplug the AC adapter from the outlet to see if the interference disappears.
- 2. Connect the AC adapter to the outlet in another room and check if the interference still exists.
- 3. Use an outlet that is far away from the interfered appliance.
- 4. Re-orient your computer in respect to the interfered appliance to see if there is improvement.

If all of these failed, please call your dealer for help.

CE

This equipment complies with the requirements set out in the Council Direction on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC). For the evaluation regarding the electromagnetic compatibility, the following standards were applied:

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EN55022 +A2:2003 Class B EMI Conduction and Radiation EN61000-3-2 Harmonics EN61000-3-3 +A1:2001 Flicker (Voltage fluctuation)
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EN55024 EMS

EN61000-4-2 +A2:2001 ESD

EN61000-4-3 +A1:2002 RS

EN61000-4-4 +A2:2001 EFT

EN61000-4-5 +A1:2001 Surge

EN61000-4-6 +A1:2001 CS

EN61000-4-8 Power-Frequency Magnetic Field

EN61000-4-11 +A1:2001 Voltage Dips and Voltage Interruptions

LVD EN60950 :2001

ETSI EN301 489-01 V1.4.1 EMC Standards for Radio Equipment

ETSI EN 301 489-17 1.2.1 EMC Standards for 2.4GHz Wideband Transmission Systems)

ETSI EN 300 328-2 V1.2.1 EMC Standards for Using Spread Spectrum Modulation Techniques

UL, TÜV

AC Adapter (EN60950 LVD is included in TÜV)

E-Mark

Registered e13

Material Safety and Recycling Notice

All materials used in the construction of this unit are recyclable or environmentally friendly. No mercury, cadmium, CFC or related materials were used in the manufacturing process or inside the product.

Please recycle the packing materials, and at the end of the unit's life, all other materials in accordance with the local regulations.

Please refer "Materials and Recycling" for the contents of the materials.

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GETTING STARTED

Unpacking

The following components come with your handheld computer.

If anything is missing or damaged please notify the dealer immediately.



Handheld computer unit

Getting Started

- AC adapter
- AC power cord
- Stylus
- Data sync cable (USB)
- User's guide
- Utility CD

Quick Check

- Attach the AC adapter to AC outlet. The adapter LED indicates the power is ready.
- Plug the adapter to the handheld computer. The charge LED may light up indicating battery charging if battery is not full.
- Turn ON the computer by pressing the power button momentarily.
- Test with stylus operations
- Adjust backlight brightness:

Tap Start → Settings → Control Panel → System Console → Backlight Level, adjust the brightness level as desired.

(**¾** = **Start**)

- Adjust backlight timeout:
 - In the same window adjust the timeout period as desired.
 - Timeout is the idle time that the LCD backlight would turn OFF automatically.
- Press the power button for > 1 second to turn LCD backlight OFF or ON
- Press power button momentarily to turn OFF computer.

Controls, Indicators, and Ports Front:



1. **Wireless ON/OFF** (Flight button)

Turn ON/OFF the wireless device (Wireless device WLAN, GPRS, Bluetooth, etc. are optional) Please turn it OFF at locations with wireless control (hospital, onboard airplane, etc.)

- 2. Button 1 (User programmable)
- 3. Button 2 (User programmable)
- 4. Cursor Control[Left], [Right], [Up], [Down] 4 directions[Enter] at the center
- 5. Button 3 (User programmable)
- 6. **Button 4 (User programmable)**
- 7. **Power Button**

Press momentarily turns the power ON or OFF.

Press > 1 second turns LCD backlight ON or OFF

(actually power OFF is "suspend" only, the battery is still backing up memory data)

8. **Power indicator**

- 10. \forall Wireless indicator

Note: You may change the functions of button 1~4. Refer "Basic Operations" "Set Your Own Button Functions" for details.

Rear:



- 1. Speaker (under hand strap)
- 2. Master switch

Turns OFF all power including backup battery.

All data in RAM will be lost when turned OFF.

The switch is for troubleshooting or emergency only.

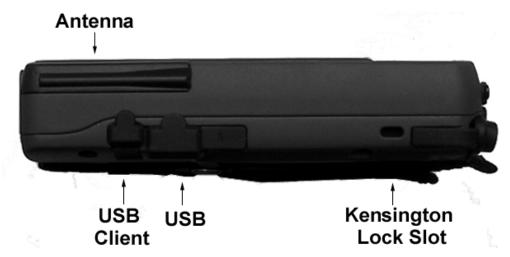
- 3. Stylus
- 4. Reset Button

Soft reset: Press the reset button to warm-boot. After reset the data remains intact.

Hard reset: Press the reset button and power button simultaneously. Hard reset clears all data, all settings, then cold-boot. After reset need to calibrate touch screen, do set up, etc. again, but RAM data can not be recovered.

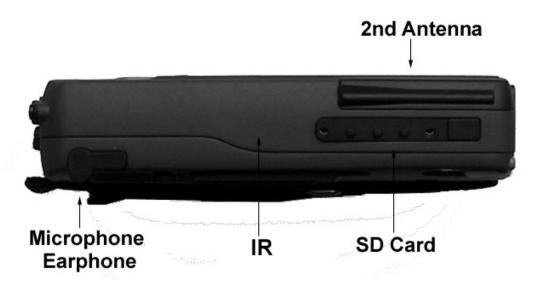
- 5. Battery knob
- 6. Battery
- 7. Microphone (optional)

Left:



- Antenna (optional)
 Wireless device antenna
- 2. USB client port For data sync with another computer
- 3. USB port
- 4. Kensington lock slot

Right:



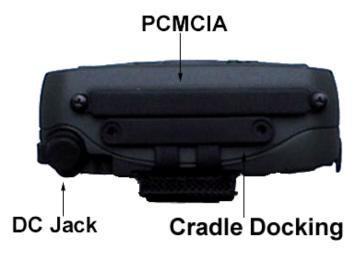
- 1. Microphone/Earphone jack
- 2. Infrared port (IR, optional)
- 3. SD card slot (Secured Digital card)
- 4. 2nd antenna (optional)

Top:



Serial port
 (serial port may be occupied by internal device)

Bottom:



- 1. DC jack
- 2. PCMCIA slot (maybe not available on some models)
 One PCMCIA type II slot
 CF (Compact Flash card) connectivity is possible by PCMCIA-to-CF
 adapter (optional)
- 3. Cradle docking connector Connection to cradle

Operating Environment and Ruggedness

A clean and moisture-free environment is preferred.

If it is necessary to work in a hostile environment, please make sure all ports are well protected from dust, moisture, or water. Proper isolation from extreme hazardous exposure is recommended.

The computer is designed with rugged features of vibration, shock, dust, and rain/water protection. However, it is still necessary to provide appropriate protection while exposing to harsh environments.

All connectors will decay or corrode if exposed to water or moisture. Corrosion is accelerated if the power is ON. Please take proper water-resistant measures for cable connections.

The DC jack is sealed type which may be operated with water splashing while DC power cord attached. All other port caps should be in place when no cable is attached. Regularly maintain the computer by cleaning dust, water, etc. will help keeping it in optimal condition.

Warning: There is no isolated compartment in SD slot, PCMCIA slot, and docking. These ports must be tightly sealed while working with dust/water.

COMPONENTS AND FUNCTIONS

AC adapter

When using the AC adapter:

- Use a properly grounded AC outlet.
- Use one AC outlet exclusively for the computer. Having other appliances on the same line may cause interference.
- Use a power strip with built-in surge protection.

The AC adapter automatically detects the AC line voltage (110V or 220V) and adjusts accordingly.

Battery

The computer will automatically switch to battery power when the external power source (AC adapter) is disconnected.

Battery Power Saving Tips

- Turn OFF the LCD backlight when it is visible with external light
- Lower the intensity of the backlight

• Shut down the computer when not to use for a longer time

Battery Low

When the battery is nearly exhausted, the computer prompts a window warning it. Once the Battery Low warning occurs, please do either or all of the following:

- 1. Save and close the files you are currently working on
- 2. Plug in the AC adapter to recharge the battery
- 3. Swap a charged battery

Optional Devices

Note: Not all options are available on all models.

Cradle

For docking, port extension, battery-charging.

Spare Battery

Exactly the same as primary battery.

Wireless LAN (Local Area Network)

IEEE 802.11b wireless LAN card

Components and Functions

GPRS (General Packet Radio Service)

Wireless voice and data communication

Bluetooth

Short-range wireless data communication

GPS (Global Positioning System)

Positioning your location by GPS satellite signals

Digital Compass

Solid-state compass with digital readout and graphic display

BASIC OPERATION

(Pocket PC dedicated instructions are listed on later pages of this section)

Start Programs

 $(\mathbf{F} = \mathbf{Start})$

Tap Start → **Programs** → (**desired programs**)

Or tap **Start** → **Windows Explorer** → (**desired programs**)

Calibrate Touch Screen

Tap Start → Settings → Control Panel → Stylus to calibrate.

Use pen to touch the center of mark "+" and repeat the action when the mark "+" moves. Tap the screen to confirm when finished.

Setting Power

Tap Start → Settings → Control Panel → Power, set the length of idle time for computer to shut down automatically.

Setting LCD

Adjust backlight brightness:

Tap on Start → Settings → Control Panel → System Console → Backlight Level, adjust the brightness level as desire.

Setting backlight timeout:

In the same window adjust the timeout period as desired.

Timeout is the idle time that the LCD backlight would turn OFF automatically.

Adjust Volume

Tap Start → Settings → Control Panel → Volume & Sounds, adjust the volume level as desired.

Charge Battery

Plug in AC adapter will charge the battery automatically. If the battery is already full, the system will stop charge automatically.

Dock to optional cradle + adapter will charge battery, too. Cradle has a battery slot to charge another battery externally.

Swap Battery

To swap the battery:

- 1. Turn power OFF
- 2. Turn the battery knob counterclockwise to loose the battery
- 3. Remove battery from compartment
- 4. Insert a new battery
- 5. Press the battery down and turn battery knob clockwise to lock it
- 6. Press power button to turn ON the computer

Basic Operation



Note: During battery swap the memory data is sustained by a small backup battery. Please swap battery within 1 minute to avoid data loss.

Set Your Own Button Functions

The lower four buttons are user-programmable.

Tap Start → **Settings** → **Control Panel** → **System Console** → **Buttons**

Define the button functions from the selection list.

Other buttons are not user-programmable.

Backup Data

There are two types memory on the computer: Temporary memory RAM (Random Access Memory) and permanent memory ROM (Read Only Memory). Optional memory cards act like ROM.

Most data of ongoing program are stored in RAM. It would stay intact when power turns OFF. (Actually pressing power button OFF/ON is "suspend/resume" only. Part of the computer is still running, power supply to memory is always ON.) However, data or program in RAM will be lost when hardware reset or master switch turns OFF. And if primary battery been removed for too long time (for example, swap battery for >1 minutes), there are risks to lose RAM data as back up battery may run exhausted. Long time storage will drain primary and backup battery to exhaust thus unable to keep memory data.

To avoid data loss you may move data into ROM or memory card as follows:

Tap and hold the file to pop up the small menu. Tap **Copy** then browse to **Flash Disk** (ROM) or memory card folder. Tap and hold to pop up the small menu, tap **Paste**.

Flask Disk folder:

Tap Start → **Programs** → **Windows Explorer** → **Flash Disk**

Data Sync

You may transmit/receive data between this handheld computer and other computers via data sync.

Install Microsoft ActiveSync utility on host computer.

Connect handheld computer and host computer with the USB cable.

Follow the prompt to execute data sync.

Perform Copy, Paste, Cut, Delete, etc. same as PC.

Note: ActiveSync run on Windows CE prompts "Failed to Set Up Partnership" because it's designed for Pocket PC only. However, it still works despite the message

Cradle (optional)

Cradle is the device for docking, port extension, and battery charging. AC adapter may attach directly to cradle and charges the computer battery as well as spare battery.

There is a battery slot on the back of cradle to mount spare battery.

Mount the cradle:

- 1. Computer may dock either power is ON or OFF (recommend OFF)
- 2. Open the rubber cap on the docking connector
- 3. Align the computer with cradle docking connector
- 4. Firmly push the computer down to engage the docking connector
- 5. Turn rotary latch to fix the computer

Remove from the cradle:

- 1. Turn loose the rotary latch to release computer
- 2. Pull away the computer either power is ON or OFF

Mount spare battery: (spare battery is optional)

Perform the same procedure as mounting primary battery on computer. Cradle will charge computer and spare battery simultaneously.

PCMCIA Slot (may not be available on all models)

The computer accepts one type-II PCMCIA card. Insert the card firmly into the slot and fix the rubber cover for water/dust protection.

To remove the card, push the eject button to pop out the card. The eject button can hide into the compartment by pushing it inward gently.

May need to load PCMCIA card driver to enable the function.

Note: If the computer is working with dust, moisture, or water, be sure to fix the PCMCIA rubber cap tightly with screws.

SD Slot

The computer accepts one SD card (Secured Digital Card).

Insert the card firmly into the slot and fix the rubber cover for water/dust protection. To remove the card, push the eject button to release it.

Note: If the computer is working with dust, moisture, or water, be sure to fix the

SD rubber cap tightly with screws.

GPS (optional)

Tap Start → Program → Windows Explorer → (map software) to start GPS.

Digital Compass (optional)

Tap Start → Program → Windows Explorer → Digital Compass to start digital compass

Calibration:

Tap **Calibration** on compass window, hold computer horizontally and turn 360° two times, the compass will calibrate automatically.

Stay away from metal or magnetic field. The compass may be interfered by them.

(Pocket PC Dedicated Instructions)

Get Help

Tap **Start** → **Help**

Select the help information needed.

Calibrate Touch Screen

Tap Start → Settings → System → Screen → Align Screen to calibrate.

Adjust Volume

Tap Start → Settings → Personal → Sounds & Notifications, adjust the volume level as desired.

Set Your Own Button Functions

Tap Start → **Settings** → **Personal** → **Buttons**

Define the button functions from the selection list

Today Screen

The today screen displays information of today's appointments and status icons, etc. Tap the information listed on today screen to execute the associated program. Tap **Start** → **Today** to enter Today screen.

Find A File

Tap Start → Find

In **Find**, enter the file name, word, or other information you want to search for, If you have looked for this item before, tap the **Find** arrow and select the item from the list.

In **Type**, select a data type to help narrow your search. Tap **Go**, My document folder and subfolder are searched in the results list.

Remove Programs

Tap Start → Settings → System → Remove Programs and follow the prompts to delete.

Manage Certificates

Tap Start → Settings → System → Certificates

Input your certificates. To delete a certificate, tap and hold it in the list, and then tap **Delete**.

Input

Tap Start → **Settings** → **Personal** → **Input**

On the input method tab, select an input method and change the desired options.

Menus

Tap Start → Settings → Personal → Menus and select the items you want to appear on Start Menu.

Owner Information

Tap Start → Settings → Personal → Owner Information and follow the descriptions. On the identification tab, enter your personal information. Select "Show information when device is turn on" your information will be displayed at power ON.

Password

Tap Start → Settings → Personal → Password and follow the descriptions.

Sounds & Notifications

Tap Start → Settings → Personal → Sound & Notification and set your favorite notifications.

Clock

Tap Start → Settings → System → Clock.

Memory

Tap Start → Settings → System → Memory and follow the descriptions.

The main tab displays the amount of memory the system has allocated to file and data storage versus the available memory.

The storage card tab displays how much memory is available on a storage card that is inserted in your device.

The running programs tab displays the list of the currently active programs. You can stop a program by selecting it in the list and tapping stop.

Power

Tap Start → Settings → System → Power

The Battery tab displays the amount of battery power remaining.

SPECIFICATIONS

CPU

Intel XScale PXA255 CPU speed 400MHz

Memory

System RAM 128MB

System ROM 64MB

Display

Type: 4" Active TFT Transflective Color LCD

Resolution: 480 x 640 pixels or 240 x 320

Mode: VGA or QVGA

Color: 256 for VGA or 64K for QVGA

Backlight: LED

Touch Screen

Type: Resistive

Specifications

Interface: Serial

Resolution: >480 x 640

I/O ports

USB port (USB 1.1 compatible)

USB client port

Serial port

Audio ports (Microphone/Earphone)

PCMCIA slot (type II x 1)

SD slot

System Unit Dimensions and Weight

Width: 90mm (W 3.5")

Depth: 150mm (H 5.9")

Height: 33mm (D 1.3")

Weight: 450g (15 oz.)

Specifications

AC Adapter

Voltage: AC 90~240 V

Frequency: 50/60 Hz

Output Voltage: DC 10V 3.5A

Maximum Power: 35 Watts

Dimension: 108mm (4.2" W) x 56mm (2.2" D) x 34mm (1.3" H)

Weight: 270 g (9.5 oz.)

Battery

Type: Lithium Ion

Capacity: 7.4V 1800mAH

Dimension: 71mm (W 2.8") x 64mm (D 2.5") x 12.3mm (H 0.5")

Weight: 108 g (3.8 oz.)

Materials and Recycling

Materials of the computer are as follows:

Cabinet: Aluminum alloy ADC-12 or A380,

Magnesium alloy AZ91D,

UL grade PC+ABS GE C6200 or TN-3813BW

Bracket: Aluminum 5052

Steel with Nickel plating

Stainless Steel S304

Cushion pad: Nature rubber

PCB: FR-4, UL 94V0

Battery: Rechargeable Lithium Ion

Packing: Carton: Unbleached paper

User's Guide: Recycled/Recyclable paper

Please recycle the parts according to local regulations.

Specifications

Environmental Ratings

Temperature: DA04I:

 0° C ~ 45° C (32° F ~ 113° F) operating

 -20° C ~ 60° C (-4° F ~ 140° F) storage

DA04M:

 $-20^{\circ}\text{C} \sim 50^{\circ}\text{C} (-4^{\circ}\text{F} \sim 122^{\circ}\text{F}) \text{ operating}$

 -40° C ~ 70° C (-40° F ~ 158° F) storage

Humidity: $5 \sim 95\%$ Non-condensing operating

95% maximum storage

Altitude: $0 \sim 12,180$ meters $(0 \sim 40,000$ feet) operating and storage

MAINTENANCE / SERVICE

Cleaning

Always turn OFF the power, unplug the power cord and remove the battery before cleaning.

The exterior of the system and display may be wiped with a clean, soft, and lint-free cloth. If there is difficulty removing dirt, apply non-ammonia, non-alcohol based glass cleaner to the cloth and wipe.

An air gun is recommended for cleaning water and dust. For salty water please wipe with fresh water then blow-dry with an air gun. Close all caps tightly before water cleaning.

Troubleshooting

Should the computer fail to function properly, you may try the following troubleshooting steps: (Please backup your data before troubleshooting)

- Check AC adapter, battery, and the power source.
- Press hardware reset to re-boot the computer.

- Turn OFF the master switch for a while then turn ON and re-boot.
- Remove the software suspected.

RMA Service

If troubleshooting is unsuccessful, please consult your dealer for service If it is necessary to send in the computer for repairs, please follow the dealer's instructions for RMA# procedure.

Shipping instructions:

- 1. Use the original shipping container and packing materials, if possible.
- 2. If the original packing materials are not available, wrap the equipment with soft material (e.g., PU/ PE form) then put the wrapped equipment into a hard cardboard shipping box.
- 3. Include a sheet with the following information: (Note: please keep a copy for your record)
 - Name
 - Address

- Unit serial number
- Place and date of purchase or the original invoice number
- Date of failure
- A DETAILED description of the problems you have encountered
- A list of the hardware/software configuration, if applicable.
- 4. Clearly mark the outside of the shipping box with the RMA number. This will facilitate faster processing and avoid faulty return.
- 5. Unless prior arrangements have been made, the customer is responsible for all shipping costs. Unauthorized use of the company's shipping accounts is not permitted.

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